



**AMERICAN BUILDER
AND BUILDING AGE**

IS THE BUSINESS
JOURNAL OF THE
ACTIVE MEN OF THE
BUILDING INDUSTRY

SUBSCRIPTION PRICE in the United States and Possessions, 1 year, \$2.00; 2 years, \$3.00; 3 years, \$4.00; Canada, including duty, 1 year, \$2.50; 2 years, \$4.00; 3 years, \$5.00; foreign countries, 1 year, \$4.00; 2 years, \$7.00; 3 years, \$10.00. Single copies, 25 cents each. ADVERTISING RATES—Furnished on application. Advertising forms close on the 10th of the month preceding date of publication. Entire contents copyright, 1932, by American Builder Publishing Corporation.

AMERICAN BUILDER AND BUILDING AGE

(A Simmons-Boardman Publication)
Name Registered U. S. Patent Office

54th Year

AUGUST, 1932

Vol. 53—No. 5

Front Cover.....	Drawing by L. E. Arent	1
Editorials		10-12
A Call to Action. No Success without Local Effort. Help at Last for Home Loans. Thirst for Knowledge. Some People Have Money. Homes in the Country.		
Frontispiece		13
A Rising Tide of Public Sentiment Favors Home Repairs and Remodeling.		
Opportunity Seen for Organizing Home Repair Drives in Every City	14, 15	
Local Campaigns through Dealers, Builders and Craftsmen Scheduled for Every City and Town.		
Detroit Stages a Demonstration Modernized Home.....	16, 17	
How the Building Fraternity of Detroit, Mich., Got Spectacular Publicity for Home Repairs.		
He Puts Home Repairs and Modernizing on a Practical Basis.....	18, 19	
Winnetka, Ill., Salesman Acts as a "Broker for Builders" and Directs Successful Selling of Home Fixing.		
An Estimating Short Cut.....	22	
A. W. Holt Describes How Home Cost Service Saves Time and Catches Mistakes.		
Home Design Section.....	23-28	
Photographs and Dimensioned Floor Plans of Twelve Well Designed Popular Sized Homes by Various Architects.		
How Washington Builder Sells Old Houses.....	29	
The Story of Some of W. C. Miller's Activities.		
Now—Homes for Everyone!	30, 31	
The Chicago Realty Finance Co. Points the Way to Economical Housing and Low Cost Living with Its Four-Room Houses on 90-foot Lots for \$2650.		
Analysis of a Perfected House Plan.....	32-34	
John A. Ahlers, Architect, Explains the Standard House Plan Evolved for the Roland Park Co., Baltimore.		
Modernizing Details for a Paneled Basement Playroom.....	35	
Folding Tennis Table Also Detailed.		
The House of the Month.....	36, 37	
Delightful Example of the Stately Southern Colonial Built at Hempstead, L. I., Arthur E. Allen, Architect.		
Cottages Built on Mass Production Plan.....	38, 39	
How the E. K. Wood Lumber Co. of Los Angeles Turned out 550 Cottages to House the Olympic Games Athletes.		
Details Changed for Porcelain Enamelled House.....	40	
Realtors Hold Annual Meeting.....	41	
Current Construction Figures.....	42	
New Catalogs Offered to Builders.....	42	
Practical Job Pointers.....	44	
What's New in Building Materials.....	46	
New and Improved Builders' Equipment.....	48	
Letters from Our Readers.....	50	
Advertisers' Index.....	53	

MEMBER OF THE AUDIT BUREAU OF CIRCULATIONS
AND OF THE ASSOCIATED BUSINESS PAPERS

AMERICAN BUILDER AND BUILDING AGE, with which are incorporated National Builder, Permanent Builder, and the Builder's Journal, is published on the first day of each month by the American Builder Publishing Corporation.

Henry Lee, Chairman of Board; Samuel O. Dunn, President; Bernard L. Johnson, Robert H. Morris and Delbert W. Smith, Vice Presidents; Elmer T. Howson, Secretary; John T. De Mott, Treasurer.

Bernard L. Johnson, Editor; Joseph B. Mason, Managing Editor; E. L. Gilbert, Eastern Editor; H. F. Lane, Washington Editor; L. E. Arent, Art Director; Robert H. Morris, Business Manager.

EDITORIAL AND PUBLICATION OFFICE: 105 W. Adams St., Chicago; Telephone, Randolph 0794. Branch Offices: New York, 30 Church St.; Cleveland, Terminal Tower; Washington, 17th and H Sts., N. W.; San Francisco, 215 Market St.

KALMANTRUSS STEEL JOISTS

HAVE A WIDE FIELD OF APPLICATION



PARKWOOD MANOR, BYWOOD, DELAWARE COUNTY, PA.

Architect: Karl F. Otto, Philadelphia . . . General Contractors and Owners: Gussman and Berman, Philadelphia.

This typical present-day apartment house is one of numerous examples of buildings in which Kalmantruss Steel Joists have been successfully used.

They are suitable for all types of light-occupancy structures, and have been specified for banks, office buildings, hotels, apartments, hospitals, schools, and private dwellings, in all parts of the country.

Kalmantruss Steel Joists and related specialties, widely accepted by contractors and builders, provide a standardized method of constructing light, strong, rigid, and fire-resisting floors which meet every demand of modern design. At the same time, lower costs are made possible by the ease and speed of erection and the elimination of expensive form work.

Kalmantruss floor and roof construction consists of a combination of Kalmantruss Steel Joists, Rigid Bridging, Kalman Metal Lath, and necessary anchors and clips.

Detailed information will gladly be furnished regarding the many advantages obtained by using Kalmantruss Steel Joists and other Kalman products. Address any of the district offices listed.



KALMAN STEEL CORPORATION

Subsidiary of Bethlehem Steel Corporation.

GENERAL OFFICES: BETHLEHEM, PA.

District Offices: Albany, Atlanta, Baltimore, Boston, Buffalo, Chicago, Columbus, Detroit, Houston, Milwaukee, Minneapolis, New York, Philadelphia, Pittsburgh, St. Louis, St. Paul, Syracuse, Washington. Export Distributor: Bethlehem Steel Export Corporation, New York.

NOFUZE LOAD CENTER

conveniently located in the kitchen, eliminates the old fuse box with its attendant inconvenience of fuse replacement.



The Woman's Vote IS FOR THE FUSELESS HOME

THOSE who build homes to sell know from experience that the woman's point of view must be carefully considered. She is choosing more than a home. This house will be her "workshop," her "office." It is she who peers into closets, estimates distances, conveniences, labor-saving arrangements and devices.

The *Fuseless Home*, made possible by the Westinghouse NOFUZE Load Center has met with the instant approval of every woman told about it. The salesman will find in it one of the most potent sales tools that has been placed in the builder's hands since electricity became a household servant.

A blown fuse is no longer a source of inconvenience in homes where the attractive NOFUZE Load Center, mounted flush with the kitchen wall, has replaced the old fuse box in

the cellar. When a dangerous overload occurs—"click" goes the Flipon (the small circuit breaker which replaces the fuse and switch)—the circuit is opened and the wiring is safe. And when the cause of the overload has been removed, the mere flip of a handle restores service instantly. No hunting in the dark for fuses . . . no phone calls for the service man. A child can operate it, and it's as safe as an ordinary wall switch.

Be prepared to take advantage of the sales appeal this new development offers . . . especially when women make the decision.

The coupon will bring you an illustrated booklet containing a complete description of the Nofuze Load Center, of how it operates, and of the convenience and protection that make it truly the heart of the modern home.

Westinghouse

T 79285

Quality workmanship guarantees every Westinghouse product



WHEN WRITING ADVERTISERS PLEASE MENTION THE AMERICAN BUILDER AND BUILDING AGE

MAIL THE COUPON

Westinghouse Electric & Manufacturing Company
Room 2-N—East Pittsburgh, Pa.
Gentlemen: Please send me a copy of C. 1913.

Name
Company
Address
City State ABBA 8-32

AMERICAN BUILDER AND BUILDING AGE

A Call to Action

THE door opens to a great opportunity for the men of the home building industry.

Not before in five years has the fundamental basis for home building and home repair activity been so favorable as today.

The Home Loan Bank Act has been passed, assuring funds at reasonable rates for home financing; home repairs and remodeling have emerged as the soundest means to unemployment relief and have been officially endorsed at Washington for all community drives for this fall and winter; and, finally, the manufacturers and dealers serving the home building market have united on a campaign of community organization and of sales promotion which, backed by radio, press, pulpit and all civic bodies, will reach every city and town with a definite program designed to stimulate home building and to provide for and support an every-house survey by qualified building industry men for needed repair and improvement work. This Allied campaign, sponsored by this publication, is described in detail elsewhere in this issue.

The door of opportunity is open. What will you men of the building industry do about it? Are you willing to work to CREATE business? Are you able to pry

loose from the old easy chair, and hustle out after orders, NOW THAT THE TURN HAS COME?

Builders have been complaining of no contracts. Dealers have been waiting for consumer demand and are groaning at their lack of sales. Skilled craftsmen by the thousands have been walking the streets.

Here's a chance for all to go back to work. Every individual interested in any way in the small construction industry can and must do his part now to take advantage of this new and favorable situation.

A community drive for repairs and improvements must be organized in every city and town; and this local work must be done by the local building men. The National Headquarters will help; but the real work must be done locally. What the building interests of Muncie, Ind., Lansing, Mich., and Danville, Ill., and over two hundred other towns have done YOU can do in YOUR town.

Thousands of jobs can be found and created among building owners. Improvements will be made. Owners, properly approached, will authorize the work that is needed and for which they have the money to pay. Property values will be maintained. Many interested prospects for new homes

or other new buildings will be found among those interviewed. The home building industry can get back to work now and, as in 1921, can lead the way up to the general revival of all business

Don't wait for outside help or for any further invitation. Get busy now. Be ready to take full advantage of the coming big national Allied campaign of publicity and sales promotion. Don't delay. Home building, home repairs and home improvements are in the spotlight of favorable public opinion; and the time for the men of the building industry to organize, canvass and sell is now.

Allied Construction Industries Home Repairs Campaign



AN EVERY-HOUSE SURVEY IN EVERY COMMUNITY
FOR NEEDED REPAIR AND IMPROVEMENT WORK

NO SUCCESS WITHOUT LOCAL EFFORT

ARTHUR M. EAST can't do it all alone. Not even if he were operating from the White House could he succeed in organizing an Allied Building Industries Campaign for home repairs and remodeling in every important city and town unless he had the active assistance back of him of the building industry men in each community.

Who is Arthur M. East?—He is the man who organized and conducted the Save the Surface Campaign for the paint and varnish industry, and is the man selected as the executive director of the Co-ordinated Sales Promotion Campaign which the newly formed Allied Construction Industries is launching.

An impressive group of the biggest manufacturers serving the home building field is back of this move to organize and operate intensive home repair campaigns in every city during the next five months. They are voluntarily contributing the necessary funds. The Administration at Washington, through Secretary of Commerce Robert P. Lamont and Frederick M. Feiker, chairman of the President's Conference Committee on Home Repairs and Modernizing, has encouraged and endorsed the effort as offering the best form of unemployment relief. The lumber, building supply and home equipment dealers, through their associations, are co-operating.

Field organizers are to be employed; state governors, city mayors, women's clubs and all business and civic groups, are to be enlisted; and the entire drive is to be made known to the general public through extensive use of newspapers, magazines, billboards and radio.

However, all of this national organization brought into being to stimulate employment through home repairs and remodeling, will be of no effect and its tangible results will be nil as far as your community is concerned unless it has the support locally of the active building industry men. All should be interested and should have a part in organizing the drive, in conducting the surveys, and in handling the work.

Carpenters, masons, plumbers, electricians, painters, sheet metal workers, builders, dealers, architects, bankers and realtors all have an important part to play in this

Allied Construction Industries Home Repairs Campaign



AN EVERY-HOUSE SURVEY IN EVERY COMMUNITY
FOR NEEDED REPAIR AND IMPROVEMENT WORK

campaign. It will mean hard work and different work than many of you are accustomed to. But it is worth while. A real job of selling home repairs and improvements must be done and you men will have to do it. Fortunately, those who put the most in will get the most out. It's the big chance to get employment and home building started right away.

Don't wait for Headquarters to come to you. Start now and you will be ready to profit most from the help which Headquarters and the nation-wide campaign will presently bring to you.

HELP AT LAST FOR HOME LOANS

THE last major official act of the 72nd Congress before it adjourned on July 16 was the enactment of the Federal Home Loan Bank Bill.

In the opinion of many of the country's leading economists, this Bill is the most constructive piece of permanent financial legislation to be enacted since the Federal Reserve Act. The home building industry has made a valiant and determined fight for this Bill, and its enactment without serious changes should immediately relieve much of the fear, tension and stagnation which have ruled in home mortgage circles for some time past.

The new system marks a sound innovation in American finance, namely, separation of long time home mortgage credit from short term banking, and giving to long term credit a "Reserve System," or discount market. It recognizes the American home as a sound and basic unit; and securities based upon it are to become a vital and component part of our national financial structure.

On establishment of this new system of Federal home loan banks, prompt relief will be afforded the thousands of citizens whose homes are under short term mortgages, and a permanent dependable reservoir of credit will be made available to the home building industry. New to America, the Bill creates an American adaptation of an established European mortgage banking

system. Some type of central mortgage bank has been developed in practically every country of continental Europe. In every case these central banks issue bonds, although few of them have been as well safeguarded as those to be issued under the new Home Loan Bank System. However, these bonds have sold on a basis comparing very favorably with the Government bonds of their respective countries and sometimes are quoted to yield even less than the Government bonds. This European experience makes it safe to predict complete success for the new American system.

THIRST FOR KNOWLEDGE

In the three months, April, May and June, readers of this publication have sent requests to its publication office for 11,447 booklets, books and catalogs offered by manufacturers through the readers' service department.

One hundred and forty-two separate catalogs were carried in the numbered listings in April, May and June issues. This means that, on the average, 80 readers requested service on each item listed. Eighty was the average; the high score of 336 was registered for one booklet offered—a collection of face brick home designs. A close second—295 requests—was scored on a millwork catalog featuring a new type of double-hung window. Cement waterproofing requests ran high, with 233 readers asking for one helpful booklet of waterproofing directions, and 224 asking for another. Roofings, steel products, lumber, hardware, glass and paint, insulating material, home equipment and contractors' equipment all proved interesting to AMERICAN BUILDER readers as indicated by the volume of their requests.

The building industry has made great strides in the past few years developing many new products and greatly improving many of the old standbys. The builder, dealer and architect naturally must have the latest information if he is to be on even terms with his competition during these strenuous times. The thirst for knowledge exhibited by the active men of the building industry at the present time forecasts bigger and better contracts a little later.

SOME PEOPLE HAVE MONEY

"**P**EOPLE just haven't any money to buy" is the most frequent excuse building salesmen make when they have failed to secure business. The statement needs one important modification. Put the word "some" in front of "people."

It must be admitted that some people do not have money to buy. But many people do, and these are the ones that should be building new homes or spending money on the repair and improvement of their present property. The fact that millions of people have money to spend is proved by the fact that sales of many specialties and even luxuries continue at a good rate in spite of hard times. Sales of electric refrigerators, for example, are very little off. A prominent maker of

vacuum cleaners announces sales this year have increased over last. In these industries, salesmen have convinced people that purchase of the product was worth while. They have done a good job of selling.

So when men in the building industry say, "People do not have money to buy," they are simply admitting that they are poor salesmen.

A fine demonstration of how sales can be made in these times was put on by employees of the Westinghouse Electric & Manufacturing Co. during the months of May and June. The employees voluntarily agreed to stage a big drive in which each person would sell at least one household appliance. Many salesmen in the electrical appliance industry had been singing the old refrain, "People haven't money to buy." But in two months the 35,000 employees of the Westinghouse Co. went out and sold \$3,000,000 worth of products. Employees uncovered 68,000 live prospects, and sold 80 per cent of them—58,045.

According to H. C. Thomas, who managed the campaign, the significant point of the large sales made was the existence of much latent buying power in the country that the ordinary salesmen had not uncovered. In his opinion thousands of prospects can be sold by merely changing their mental attitude from one of hoarding to one of buying.

If aggressive selling can uncover \$3,000,000 worth of new electrical appliance buying, it could increase this total a thousand-fold in the building industry.

HOMES IN THE COUNTRY

THE depression has worked many minor and some major changes in industry and may result further in profound alterations in the national economy. For example, the building industry has been watching with interest the steady movement back to the land, which has been going on all over the country. It is very different from the land booms that have often occurred in this country. The present migration from the cities to the country is not one that is inspired by dreams of agricultural prosperity, but is in the nature of a flight to refuge from distressing or impossible city living conditions. The objective is not business but the finding of a quieter, less expensive home with garden and poultry privileges.

It is estimated that the excess of emigration from the cities to the country over the opposite movement will this year be about a million people and will probably be larger next year. If this movement should persist for a few years, it would contribute powerfully to restoring the balance between agriculture and industry.

The immediate result from a builder's viewpoint is that many farm and village houses have been fixed up or are now being put into habitable condition. Especially is this true of the territory out from the cities that is readily reached by auto in half an hour or so. Commuting out into the country from industrial centers is opening up vast areas for modest homes.



A RISING TIDE of Public Sentiment Favors Home Repairs and Remodeling

Almost every day word comes of another city or town where the building fraternity has organized or is organizing a home repairs campaign . . . Detroit, Minneapolis, Cincinnati, Chicago . . . The movement is spreading . . . YOUR town perhaps needs stirring up and fixing up, too . . . Can we help you to get things started?

—Editor American Builder and Building Age.

OPPORTUNITY SEEN FOR ORGANIZING

Local Campaigns Through Dealers, Builders and Craftsmen Scheduled for Every City and Town.

ABUILDING industry campaign in every important city and town will be launched within 30 days, if plans now well matured are put into operation. Heralded nationally by a great radio, newspaper and billboard display, financed and directed both nationally and locally by unified, responsible elements of the entire building industry, endorsed by the administration at Washington and backed by local civic bodies, this campaign centered on home repairs and the remodeling of stores, business buildings and apartments, is seen as the most significant development in the home building industry in a decade.

Arthur M. East, well known to many readers of this publication as organizer and directing manager of the Save the Surface Campaign of the paint and varnish industry, heads this new campaign and is actively supported by an Organization Committee of fourteen prominent building material manufacturers and dealers. Contractors, architects and government officials representing the general public of home and building owners are also active on this committee and in this work of organizing nationally and locally.

A budget is now being raised through cash pledges by manufacturers, each contributing in proportion to the extent of his market in modernizing and repairs. Already an encouraging amount has been pledged and rally meetings scheduled for Chicago July 26 and New York July 29 are expected to complete the needed total.

Lewis H. Brown, president of the Johns-Manville Corporation, New York City, is chairman of the Organization Committee. In a letter to manufacturers, he said, "I know that you will be interested in the results of recent meetings in New York and Chicago, called by Secretary Lamont of the U. S. Department of Commerce, at the request of numerous building material manufacturers and individuals prominent in the building industry.

"The purpose of the meetings was to consider whether present conditions, and particularly the unemployment situation, offered the construction industry an opportunity to co-ordinate its efforts in a national educational campaign, having as its purpose the stimulation of business, and the creation of employment through repair, maintenance and modernization work.

"Both groups, representative of important phases of construction activity, were enthusiastic over the possibilities of uniting in a co-ordinated program—providing a sound, practical plan of operation could be evolved.

"On Friday, June 24 in New York, a definite proposed plan of action, prepared by a sub-committee, was presented to the Organization Committee and unanimously approved and enthusiastically endorsed."

The plan aims to sell building material through local repair, maintenance and modernizing campaigns, utilizing volunteer workers and interest locally to put on campaigns which will be financed by the local construc-



ARTHUR M. EAST
Director of Allied Building
Industries Campaign for
Home Repairs.



FREDERICK M. FEIKER
Dept. of Commerce Executive
Sponsoring Home Repairs
Campaign.

tion industries. The mobilization of the construction industry is to be done by the man power of the industry through manufacturers' executives, trade associations, etc. It was felt, according to Arthur M. East, executive director, that the job could be done most economically and efficiently in this way. The United States will be divided into some 20 regions. The district and branch managers of the participating companies are to comprise the regional committees and the chairman of each such committee is to be known as the

LEADERS CONFIDENT OF

"The proposed co-ordinated every manufacturer and distributor sales program by Allied Construction Industry campaign on property improvements and repairs provides aggressive trade follow through on patriotic desire to put men to work. Reports to the President's Committee on Modernizing indicate forty-five million dollars spent or subscribed in fifty-six cities since January first, and seventy-five now conducting campaigns. The recent aggressive endorsement of modernizing work by the National Association of Real Estate Boards, efforts of building and loan leagues and recently enacted Home Loan Bank Bill should provide additional assurance of local co-operation in this undertaking."

Frederick M. Feiker, Director,
Bureau of Foreign and Domestic Commerce, Washington, D. C.

"I sincerely believe that for the first time in years, the construction industry has before it for consideration a practical plan designed for the common good of all concerned. It is our hope that by a co-operative group action, some business can be stimulated that perhaps could not be secured in any other way."

Lewis H. Brown, President,
Johns-Manville Corp., New York City.

"With new construction at so low an ebb, it is imperative that very important factor in giving concerted efforts be made by measurable volume, reduced

G HOME REPAIR DRIVES IN EVERY CITY



CHARLES E. WILSON
Vice Pres. General Electric Co., Vice Pres. American Radiator Co.,
Vice Chairman of Campaign Committee.



D. M. FORGAN
Treasurer of Campaign Committee.

regional director. It will be the duty of each committee to divide the towns in its territory among themselves and arrange for their sales forces to go into those towns not already organized and arrange for a meeting of the local industry, so that a local committee is set up and the local budget raised.

These regional directors would be supported by field organizers from national headquarters. The plan is to utilize the forces of the manufacturers and trade associations rather than outside paid professional help.

CAMPAIGN'S SUCCESS

though the total business may be, to those companies and workers affiliated with the building industry. The proposed Allied Construction Industries campaign will substantially stimulate this modernizing volume, increasing employment and thereby be one of the prime contributing factors to lift us out of the present depression."

Walter J. Kohler,
Kohler, Wis.

"I believe the Allied Construction Industries campaign would bring immediate encouragement to communities all over the country to make an aggressive local drive for home repairs and remodeling and would stimulate a vast amount of business along these lines. I believe the retail lumber dealers would take quick advantage of the campaign and co-operate with it to the fullest extent."

C. C. Sheppard, President,
Southern Pine Assn.,
Clarks, La.

"Allied Construction Industries campaign will go a long way toward reviving home modernizing, providing all factors in industry get behind campaign and co-operate to fullest extent possible. This campaign will uncover many thousands of modernization jobs throughout the United States; which cannot help but increase employment and sales of materials; and thus help the present unemployment situation."

R. G. Wallace,
The Masonite Corp., Chicago

"The nation-wide publicity planned for the Allied Construction Industries campaign should stimulate local relief organizations to renewed efforts on home repair and remodeling campaigns as the best means of relieving unemployment. The importance to the nation and to the construction industry of proper upkeep of the home cannot be overestimated."

J. P. McKinney, Jr.,
McKinney Mfg. Co.,
Pittsburgh, Pa.

Officially Endorsed for Unemployment Relief and Backed by Radio, Press, Pulpit, Schools and Civic Bodies.

Back of this trade work and supporting it is to be a great campaign to the general public. For this work an organization, known as United Action for Employment, is already in existence and ready to continue its activities. Mr. Carl Byoir of New York, Director, explained to the Committee the background and scope of this part of the campaign.

Great Publicity Channels Open to Building Industry

"The United Action movement," he said, "started last spring with the Association of National Advertisers, the American Federation of Labor, and later the American Legion, on the theory that if you could mobilize all the living forces of this country behind one national movement at the same time, with a sound plan, you might create employment for a million men, and this might be the start of national recovery. We thought, if the 45,000,000 men who still had jobs could begin to see a picture of re-employment, that buying, which is the only solution to business recovery, might be started. We were successful in getting practically every type of organized effort outside of the building industry into the picture."

"At that time, there were two plans which we thought you could sell the local committee. The first, the Green Bay plan or block plan; the other based on the Muncie or home modernization and repair plan. This latter was based on the theory that it is easier to get a home owner to spend \$100 in improving his home than to give money for charity to the unemployed. We organized some 2600 committees, some good, some indifferent, and some pretty bad. I am frank to say that today we could select out of the committees that have functioned perhaps three or four hundred who know how to do this job, to see that the man who makes the pledge gets somebody to try to sell him to do the job."

Many Home Owners Can Be Influenced to Repair Now

"Out of 18,000,000 home owners, there are still a great many who can and will do something about their homes. My point of view is that if you go into 400 cities and in that number get effective organization which creates 250,000 pledges per city and you cash 40 or 50 per cent of them, this plan represents the possibility of \$50,000,000 in the field in which this particular branch of the construction industry is interested."

Mr. Byoir further stated that there is unlimited radio and press publicity available to sell the public on the reasons why they should buy the new roof, repaint and modernize now, preparing the way for the work of local committees and salesmen.

He offered the fullest co-operation of the United Action for Employment, providing the construction industry would finance the mechanical means for utilizing these facilities and provide the necessary follow-up through their sales forces, dealers and contractors.

Detroit Stages a Demonstration Modernized Home

By PAUL MASSERMAN

AN experiment which bids fair to arouse the building industry in Detroit from the deep sleep which has enveloped it for the last three years has been undertaken by the city's builders, architects, manufacturers of building supplies and dealers in building accessories and furnishings.

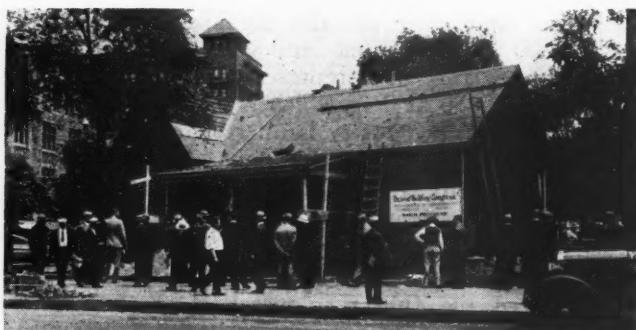
All local building interests have united in a co-operative enterprise to teach the home owners in Detroit and southern Michigan a dramatic lesson in home modernization.

Backed by the Detroit Chamber of Commerce which was sponsoring the annual Paint Up and Clean Up campaign, the Detroit Building Congress, made up of 42 organizations connected with the building industry, turned the Clean Up campaign into a Home Modernization campaign. The group succeeded in acquiring free of charge an abandoned and condemned old house located in one of the poorest sections of the city. The structure was 60 years old, of frame construction, and was in an extremely dilapidated condition.

This house was cut into three sections and moved to Grand Circus park, located in the heart of Detroit's downtown. Amid a fanfare of publicity, it was there completely modernized except for a small portion left to show how bad it had looked before.

Although the services of 35 building firms and related lines were donated free of charge, the committee in charge of the remodeling found that it needed \$400 for incidental expenses, such as printing, removal of rubbish, etc. This it proceeded to raise by assessing those firms which did not have to furnish building supplies or labor, but which instead installed furniture or removable furnishings and accessories. Thus the man who installed the ventilating system in the kitchen was assessed \$35 and others in proportion, and the \$400 was soon raised.

Then the Building Congress proceeded to acquaint the public of its program and of the value of home modernization by instituting an essay contest in the public schools, and printing 215,000 circulars to be distributed



Crowds gathered to watch the workmen at their job of modernizing the 60-year-old house in its new downtown location. Wide publicity attached to the event.

WHAT they did

Cut a 60-year-old shack into three pieces, moved it into a downtown park, modernized half of it. Opened it to the public with a ceremony attended by Governor and Mayor.

HOW they did it

Got all the building interests in town to co-operate in backing and advertising this modernizing campaign. Forty-two building groups took part under leadership of the Detroit Building Congress.

RESULTS — — —

Public interest in home improvement fully aroused. More than 80,000 people visited house in 10 days. Building permits jumped 25 per cent. Thousands of dollars of materials sold. Average of 12 modernizing jobs a day ordered at the house and many more credited to the display.

to the school children, giving the rules of the contest and telling its purposes. To the surprise of the committee, 20,000 essays were received.

At 11 o'clock on the morning of Friday, July 1, the modernized home was opened to the public in a ceremony attended by the governor, mayor and other notables.

"This shows what can be done with a little money," declared W. G. Malcomson, president of the Detroit Building Congress. "It might be more elaborate but it shows how a few dollars can modernize a dwelling and provide employment in the building industry."

In eight hours, 12,000 persons inspected the home and took away circulars explaining the modernization program and giving the names of all the firms and individuals who had donated their services to rebuild the house. Since then, the number of visitors has averaged 8,000 a day. In less than 10 days, 80,000 persons visited the house.

Results began to be evident early. The value of building permits in the week after the opening of the house increased 25 per cent over the preceding week, the first substantial increase this year. Equipment and material orders poured in. The maker of a new clothes line machine received in four days 40 orders for his equipment which retails at \$35 apiece. The man who installed the ventilating device in the kitchen received



In its modernized form the ancient structure became a dramatic illustration of what a lot of home improvement can be accomplished these days for a little money. This point was graphically shown to thousands of Detroit citizens.

four orders one morning. An architect stationed at the house received a commission to design a building in a nearby town from a passing visitor.

The value of the orders received in less than two weeks by the firms who rebuilt the house has run well into thousands of dollars. The advertising value to the firms which made the building possible is almost priceless, for each has a placard on the article which it donated, installed or built, advertising the name. In addition, many have received free publicity from the newspapers which have been liberal with their space and have assigned special writers to write on every detail of the home and its furnishings.

Describing the work, Clair W. Ditchy, architect in charge, said: "Two sides and half of the rooms were left in their original decrepit condition to show by contrast how great a change had been effected. A porch was built on one side and a terrace with an awning over it added interest to the front. A small yard surrounding the house was fenced off attractively and landscaped.

"The interior of the house was entirely rehabilitated. Some minor alterations in plan were made to accommodate a bathroom and in the living room a fireplace was built in and provided with a new chimney. The plastering was patched or if necessary was entirely replaced; new trim was installed where needed and where feasible old work was repaired. Walls were papered, floors covered with linoleum and all interior trim was redecorated. Kitchen and bath were fully equipped with the latest fixtures and approved devices.

"A representative of the Congress, usually an architect or builder, is constantly in attendance to explain and inform. Printed sheets describing the house and its purpose and listing the various agencies responsible for the work are distributed to the visitors. A record book is kept on the job where all serious inquiries are entered and these are then made available to the proper parties for follow-up.

"The response has been perfectly astounding," declared H. A. O'Dell, president of the Michigan Society of Architects. "We never thought it would have such a reception. We did not expect such quick returns. It is the finest and most encouraging sign we have had in the building line here since 1929 and gives us renewed hope that the depression is definitely passing."



Rear view of the house in its present location. This part was left in its rickety, run down state to provide a contrast with the spick-and-span front section which was thoroughly modernized.



Erected in 1861 by one John Skilling, this is what the house looked like in 1932 before Detroit builders went to work on it. There are millions of houses like it in the United States that are in need of repairs and modern improvements, waiting for builders to call.

He Puts Home Repairs and Modernizing

Winnetka, Ill. salesman acts as a "Broker for Builders" and directs successful selling of home fixing

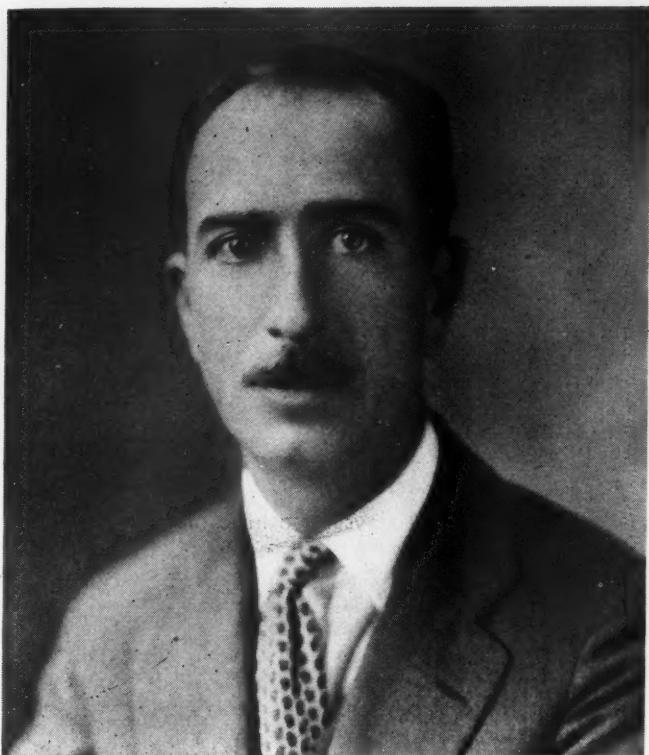
A PLAN for the selling of home repairs, improvements and "fixing up" has been evolved in Winnetka, Ill., that is so simple, and yet so effective, that it is surprising that it has not already been widely used elsewhere.

In this Chicago suburb, Irving Odell, a real estate broker and property developer who has been connected with management and sales work in the building industry for the past 25 years, organized a firm under the title, "Home Maintenance Associates."

He called in a number of the local home builders, carpenters, painters, electricians, concrete contractors, floor sanders, etc., and asked them if they would pay him a commission on jobs he would get for them. They of course agreed.

Home Maintenance Associates, under the direction of Mr. Odell, therefore became a selling organization for these men in the building industry.

Odell started out with an advertising and sales campaign to stimulate home improvements and repairs. He sent out an unusual sales letter to 2500 people, urging them to call on him when any home improvement was needed. He would supply just the right men.



Irving Odell who organized a practical home repair drive that is getting results.

In effect, Mr. Odell became a broker for building men and a superintendent for home owners desiring work done. The plan has worked very well. As a result of his first mailing to 2500 people, more than 50 jobs ranging all the way from \$10.00 to \$1200.00 have been secured.

Mr. Odell's selling experience has been very valuable in bringing in this type of work. He has built up a mailing list himself and, in addition to the advertising, letters, telephone calls and other forms of selling he carries on, has a wide circle of friends who call on him when they need work done.

Thus far, most of the work has been emergency repairs. For example, one woman called up and asked if her brick terrace could be fixed at once. She was having a party, she said, the next day. Odell got in touch with a reliable brick worker, had him on the job the same day, and made a permanent friend of the home owner.

Home Maintenance Associates co-operate with local building interests and with the local unemployment relief committee which has sponsored modernizing drives. One disadvantage of the usual community modernizing drive is that no supervision is provided for the home owner when he has work done. Under the Home Maintenance Associates plan, a satisfactory job is guaranteed and a contract given. Here is how the plan works:

An intensive advertising and selling campaign is carried on by Home Maintenance Associates. When a telephone call comes in, Mr. Odell goes out to the house and inspects it at the request of the home owner. Possibly the home owner desires a concrete platform at the rear of the house and a child's playhouse. Odell gets in touch with several men listed among his associates who, he is sure, could do a good job. Each of them turns in a bid to him. He checks the bids carefully and finally selects

This first letter was sent to 2500 people and brought in 50 jobs. Its unusual size, 17"x22", produced by planographic process, got good results. Total cost of preparing and mailing was about \$90.

on a Practical Basis

the man who, in his opinion, is best qualified to do the work, and this does not necessarily mean that he is the man who makes the lowest bid. Very often he finds that bids are too low and therefore indicate an inferior job, or a loss for someone. If several operations are needed for the job, the bids are totaled, a fair percentage for Home Maintenance Associates is added, and the proposal, stipulating a total contract sum, made to the home owner. If agreeable, the contract is signed and work goes ahead. The associates buy their own materials and handle the job in their own way. Odell acts as the owner's representative to insure a good job. He bills the home owner and after deducting his commission, pays the associated builders or sub-contractors who did the work.

The simplicity of the plan makes for its success. It puts the selling of repairs on a strictly commercial, practical basis. Home Maintenance Associates becomes the clearing house for information and people call up for all sorts of jobs. Under this plan, they know they can get work done quickly and get a sure guarantee that it will be done correctly. The result is more work for the building industry and better, more modern homes for the public.

FOR EMERGENCY REPAIRS
of any kind, remodeling, modernizing or
maintenance work around your home
CALL WINNETKA 2200
HOME MAINTENANCE ASSOCIATES

The estimate form above (size 8 1/2 "x11") is pasted on a filing envelope in which is placed all references to the job, thus keeping all data together. At left—Three inch sticker enclosed in sales letters.

Contractor	Concrete	Bricklaying	Carpenter	Total
John Doe	1684			
Alex Johnson	1632			
Otto Olesen	1542			
J. Anderson				2157.50
Ches Smith				2157.50
Tony Beck				362
				2194.00
				154
				25
				12
				191.00
				2850
				Billed 5/14/32
				Pd 5/14/32

Estimate No. 101

5/3 1932

HOME MAINTENANCE ASSOCIATES
746 ELM STREET WINNETKA, ILLINOIS

To John Smith
At 500 James Place
Winnetka Ill

Submitted by _____

We propose to do the following work.

Grade and Construct a
Concrete platform 4x20
and erect a children's
play house, all in accordance
with the attached sketch and
specifications

For the sum of \$ 219.50

All work to be performed in a thorough and workmanlike manner
Terms: Payment in full upon completion of work

Accepted _____ 1932
By _____ Odell

BUSINESS REPLY CARD
FIRST CLASS PERMIT NO. 22 Box 2416, P.L.B., WINNETKA, ILL.
2C—POSTAGE WILL BE PAID BY 2C

MAINTENANCE ASSOCIATES
746 ELM STREET
WINNETKA, ILL.

HOME MAINTENANCE ASSOCIATES
Phone WINNETKA 2200
746 Elm Street, WINNETKA

I am interested in the items checked below:
Have your estimator call:

<input type="checkbox"/> Air Brush Painting	<input type="checkbox"/> Electrical Repairing	<input type="checkbox"/> Paper Hanging
<input type="checkbox"/> Brick Walls, refaced	<input type="checkbox"/> Floors, Refinished	<input type="checkbox"/> Plastering
<input type="checkbox"/> Carpentry Work	<input type="checkbox"/> Glass, Replaced	<input type="checkbox"/> Painting Repairs
<input type="checkbox"/> Cabinet Work	<input type="checkbox"/> Gutters & Down Spouts	<input type="checkbox"/> Porch Enclosures
<input type="checkbox"/> Carpenter Work	<input type="checkbox"/> Heating Repairs	<input type="checkbox"/> Refrigerator Repairs
<input type="checkbox"/> Concrete Repairing	<input type="checkbox"/> Lathing	<input type="checkbox"/> Remodeling
<input type="checkbox"/> Cleaning, exterior	<input type="checkbox"/> Lathe Work	<input type="checkbox"/> Roof, renewal
<input type="checkbox"/> Cleaning, interior	<input type="checkbox"/> Modifying	<input type="checkbox"/> Radiators
<input type="checkbox"/> Decking, Wood	<input type="checkbox"/> Ornamental Iron	<input type="checkbox"/> Screens, New
<input type="checkbox"/> Concrete Work	<input type="checkbox"/> Paint	<input type="checkbox"/> Screens, Repair
<input type="checkbox"/> Driveway Work	<input type="checkbox"/> Painting, exterior	<input type="checkbox"/> Stucco Work
<input type="checkbox"/> Electrical Installation		<input type="checkbox"/> Yard Maintenance

Remarks _____
Name _____
Address _____
Telephone _____ City _____

Above—This free return card was enclosed with every letter. Arrangement makes it easy for prospect to check type of work he wants done.

At left—This simple contract form is used by Odell. The original goes to home owner to be signed and returned. A pink carbon copy is kept by the owner and a blue carbon copy filed in the office.

VICTORY FOR HOME LOAN BANK BILL

PRESIDENT HOOVER on July 22 placed his signature on the Reilly-Watson Federal Home Loan Bank Bill as approved by Congress on July 16, thereby authorizing a new credit facility for home owners and home builders, nation-wide in extent and with a loaning ability of 1½ billion dollars.

In announcing that he had signed this bill, the President stated that a recent department of commerce survey disclosed that there are localities in which there is today an immediate demand for homes amounting to between 300 million and 500 million dollars which could be undertaken at once if financing were available.

The Home Loan Bank Bill was the last of the series of measures asked of Congress by President Hoover as a part of the economic relief program enunciated at the White House early last winter. Under its terms, from 8 to 12 discount banks for home mortgages with a total capitalization of 125 million dollars are to be established in several sections of the country. The initial capital, not immediately supplied by the subscribing members, will be furnished by the Reconstruction Finance Corporation at 2 per cent interest until repaid. The discount banks for home mortgages are designed, the President said, to perform "a function for home owners somewhat similar to that performed in the commercial field by the federal reserve banks through their discount facilities."

Building and loan associations, savings banks, insurance companies, etc., are to be eligible for membership in the system. They are invited to subscribe for stock of the home loan banks and they may borrow from the banks upon their notes, to be secured by the collateral of sound home mortgages. Loans will be made on 1-family, 2-family and 3-family residence real estate the value of which does not exceed \$20,000.

On mortgages carrying amortization provisions with not less than eight years to maturity, an advance of not more than 60 per cent of the unpaid principal would be granted, but in no case more than 40 per cent of the property's value. In the case of mortgages not amortized, the respective percentages would be 50 and 30.

After stating that member institutions could borrow from the home discount banks to finance their loans to property owners, President Hoover said:

"The home loan banks are in turn to obtain the resources required by them through the issue of debentures and notes. These notes have back of them the obligation of the members, the mortgages pledged as securities of such obligations and the capital of the

home loan banks themselves. The debentures and notes thus have a triple security.

"The creation of these institutions does not involve the government in business except in the initial work of the reconstruction corporation and the setting up of the board in Washington to determine standards of practice. The cost of this board in Washington is to be paid by the home loan banks and the banks are to be owned and run by their members. In effect, it is using the good offices of the government and the Reconstruction Finance Corporation to set up co-operative action amongst these member institutions to mobilize their credit and resources. There are several thousand institutions eligible for membership.

"The purpose of the system is both to meet the present emergency and to build home ownership on more favorable terms than exist today. The immediate credit situation has for the time being in many parts of the country restricted the activities of building and loan associations, savings banks, and other institutions taking loans for home purposes in such fashion that they are not only unable to extend credit for the acquirement of new homes but in thousands of instances they have been unable to renew existing mortgages, with resultant foreclosures and great hardships.

"A considerable part of our unemployment is due to stagnation in residential construction. There has been overbuilding in certain localities in boom years, but there has been far less than normal construction of new homes for three years in pace with the increase of population and there is thus a shortage which, while now obscured by present huddling, will become evident with the first stage of recovery.

"Nearly 200,000 new homes are erected annually in normal times, which with initial furnishing contribute 2 billion dollars to construction and other industries. A survey by the department of commerce shows that there are localities in which there is today an immediate demand for homes amounting to from 300 millions to 500 millions of dollars which could be undertaken at once if financing were available. Thus the institution should serve to immediately increase employment.

"In the long view, we need at all times to encourage home ownership and for such encouragement it must be possible for home owners to obtain long term loans payable in installments. These institutions should provide the method for bringing into continuous and steady action the great home loan associations now so greatly restricted due to present pressures."

PROVISIONS OF THE HOME LOAN BANK ACT

Structure of the New System:

From eight to twelve regional discount banks, to be set up as soon as practicable, for the sole purpose of making loans to member home financing institutions, these loans to be secured on home mortgages.

Capital:

To be supplied within 30 days by subscriptions of member institutions. The remainder of the needed initial capital up to a total of \$125,000,000, is to be subscribed by the Federal Treasury at 2 per cent interest.

This fund is to be made available through the Reconstruction Finance Corporation, which is authorized to

issue and sell securities to this amount. Minimum capital of each bank: \$5,000,000.

Expansion of Capital by Issue of Bonds and Debentures:

Provided for, under safeguard. The discount banks may issue bonds, notes and other securities, when and if needed. The unpaid principal of mortgages deposited as collateral for bonds and de-

bentures issued by a discount bank must equal 190 per cent of such issues.

Governing Board:

A Federal Home Loan Bank Board of five full-time members, named by the President. Term of office: six years. Not more than three to be of the same political party.

The governing board is to determine the number of home loan banks and set the boundaries of each bank's territorial jurisdiction. It is to approve the rate of interest to be paid by the banks on notes, etc., issued by them.

The sum of \$300,000 is appropriated by Congress for the administrative expenses of the new system.

Institutions Eligible to Membership (or to become non-member borrowers)

Building and loan associations; savings and loan associations; co-operative banks; homestead associations; insurance companies; savings banks.

To be eligible these institutions (1) must be duly organized under State or Federal laws, (2) must be subject to inspection under State or Federal banking laws, or other similar laws, and (3) must make such home mortgage loans as in the judgment of the Home Loan Bank Board are long-term mortgage loans.

No institution will be eligible to membership in the home loan bank system or may be retained in the system if on its loans the net cost to the home owner exceeds the maximum legal rate in the state in which the property is located, or the contract rate (regardless of any exemption from usury laws) if the state law provides a contract rate for the transaction, or 8 per cent if neither a legal rate nor a contract rate is provided by the state law.

Credit Organizations:

Any organization organized under the laws of any state and subject to inspection and regulation under the banking or similar laws of such state shall be eligible to become a member if:

- (1) It is organized solely for the purpose of supplying credit to its members;
- (2) Its membership (a) is confined exclusively to building and loan associations, savings and loan associations, co-operative banks and homestead associations; or (b) is confined exclusively to savings banks; and, if
- (3) Of the institutions to which its membership is confined which are organized within the state its membership includes a majority of such institutions.

Loans Direct to Home Owners:

This is a temporary provision. Loans may be made by the discount banks direct to home owners coming within the limits of the Act who are not able to obtain mortgage money elsewhere, but this provision shall not be effective when the stock of the Federal Government has been retired.

Management of Each Individual Bank:

To be in the hands of eleven directors, bona fide residents of the district, two to be named by the Federal Board, the other nine (who must be connected with the home financing business) to be

elected by member institutions. These are to be divided into three groups, representing the large, medium sized and small sized members.

For all necessary custody and transfer of mortgages, bonds and the like as between the bank and its members a wholly disinterested registrar is to be appointed by the Board in each district. **Conditions and Amounts of Loans:**

Value of Property on which home mortgage is made must not exceed \$20,000 if mortgage is to be eligible for discount.

The value of the real estate is to be as of the time the advance is made, and is to be established by certification or such other evidence as the Board may require.

Amortized Type of Mortgage: If to run for eight years or more eligible to discount up to 60 per cent of unpaid principal, but in no event may the total of the loan exceed 40 per cent of the value of the property.

Non-Amortized Type: Eligible to discount up to 50 per cent of the unpaid principal but in no event may the total of the loan exceed 30 per cent of the value of the property.

Maximum Period to Run to maturity, if mortgage is to be eligible to discount, must not be more than 15 years.

Past Due Mortgages: Under some conditions will be eligible to discount. To be eligible, however, they must not be past due more than six months.

Definition of Home Mortgage:

Term "home mortgage," used to cover instruments eligible to discount by the banks, is to mean (1) a first mortgage upon real estate in fee simple, or (2) a leasehold under a renewable lease for not less than ninety-nine years, upon which there is located a dwelling for not more than three families; (3) such classes of first liens as are commonly given to secure advances on real estate by institutions authorized under this Act to become members, together with the credit instruments, if any, secured thereby.

Stock Subscription Required of Members:

To equal 1 per cent of the aggregate of the unpaid principal of the subscriber's home mortgage loans, but not to be less than \$1,500. Stock subscriptions may be paid for in cash, or may be made with a one-quarter cash payment at the time of application with further payments of one-quarter at the end of each succeeding 4 month period.

Non-member borrowers are to make no stock subscription, but instead are required to keep on deposit, in addition to home mortgages, security to equal in value 1 per cent of the aggregate unpaid principal of the institution's home mortgage loans. This sum is to be not less than \$1,500.

Withdrawal from Membership:

Withdrawal permitted on six months' written notice. Institutions may be removed from membership for failure to comply with regulations or if insolvent.

Limitation on Outstanding Advances:

These are not to exceed an amount equal to twelve times paid-in capital stock. Outstanding advances to any

member are at no time to exceed twelve times the amount paid in by such member for capital stock. To a non-member borrower they are not to exceed twelve times the value of the security it has deposited.

Securities to be Tax-Exempt; Acceptable for Trust Investment:

Securities issued by the home loan banks are to be exempt from taxation except surtaxes, estate, inheritance and gift taxes. The banks themselves, including franchise; capital, reserves, income, etc., are also to be tax-exempt. Real estate of the banks is to be subject to local taxation. (Banks may not own their buildings.)

Bonds, notes and other securities issued by the banks are to be lawful investment for fiduciary, trust and public funds.

Joint Liability:

The regional banks are to be jointly and severally liable for all bonds, notes, etc., issued by any of them. When specifically authorized a bank may borrow funds temporarily on its own liability.

Important Safeguards Included in the Bill:

(1) As to required assets; (2) as to the setting up of reserves; (3) as to security behind debentures issued; (4) as to dividend distribution; (5) as to mandatory rediscount if necessary; (6) as to semi-annual or more frequent examination of member institutions.

All obligations of the home loan banks must plainly state that such obligations are not obligations of the United States and are not guaranteed by the United States.

The Board may withhold or limit the operation of any home loan bank in any state until satisfactory conditions of law regulation or procedure shall be established as to give the bank adequate protection.

Where state examination is deemed inadequate for the purposes of the banks the Board has authority to establish its own examination.

Interest Rates:

For seven years from the enactment of the law the rate of interest on securities issued by the banks is not to exceed 5½ per cent. After that, not to exceed 5 per cent.

Margin between interest rates received by banks and interest paid upon obligations which they may issue is not to exceed 1½ per cent.

Over-Appraisal:

Made a criminal act. Each bank has power to make or require such appraisals or other investigations as it may deem necessary. Whoever willfully over-values any security for the purpose of influencing the Board or any bank in regard to a loan is punishable by a fine of not more than \$5,000, or by imprisonment for not more than two years, or both.

Real Estate Trend:

To be watched. Both the Board and the individual banks have authority to make studies of: (1) trends of home and other property values; (2) methods of appraisal; (3) other subjects useful for the guidance of their policies.

An Estimating Short-Cut

How Home Cost Service Saves Time and Catches an Omission on a Material List

By A. W. HOLT, Director of Service, Merchandising Council of National Retail Lumber Dealers Association

THE owner of an eastern lumber yard very recently related his first experience with the use of Home Cost Service on an actual job. One of his contractor friends came into the office smiling.

"You look happy, Bill," remarked the dealer.

"Sure, why not? I just got a live prospect on a house job. I saw them about a month ago. They weren't ready to go ahead, but they called me in again Saturday night. They have the money, picked out a plan and everything. It seems just like old times. Here's the material list. All they want to know is how much it will cost, then I think they'll go right ahead."

The contractor laid his material list and a plan from the July issue of AMERICAN BUILDER AND BUILDING AGE on the dealer's desk.

"Just a minute, Bill, you didn't need to make a lumber bill on this job until you have signed them up. This plan has a Cost Key. If you had got in touch with me I could have figured the job with you in about five minutes, and you could have given them a price right while you talked with them. Don't you remember I asked you to figure the Basic House with me last month?"

"Sure, but I saw them before I talked with you, and made up the lumber bill, but they weren't ready to go ahead so I didn't bring it in. They just got going again."

"Tell you what we'll do," proposed the dealer. "Since you have already made up the material list I'll figure it, then I'll figure the job by the Home Cost Service method and we'll see how the estimates compare. You come back at noon and I'll have all the dope for you."

The prospect had selected "The Weeks," a plan that appeared on page twenty of the July issue of AMERICAN BUILDER AND BUILDING AGE. It carries the Cost Key .937-120-788-34-14-12. The dealer's valuation on the superstructure of the house was figured for materials only, as follows: Basic House Material List \$905.00 times Cost Rate .937 equals \$847.99.

Variable items, which are different on every job, he set down in a rough outline, in which he included materials and labor, as worked out with his contractor friend, using the figures shown in the Cost Key.

Foundation walls (120 lin. ft. 6'x8"@\$2.30).....	\$ 276.00
Basement floor (788 sq. ft. @ 15c).....	118.20
Excavation (34 cu. yds. 5 ft. deep—170 yds. @60c).....	102.00
Built-in cabinets (allowance).....	200.00
Plumbing (allowance).....	350.00
Heating (furnace, allowance).....	375.00
Lighting (allowance, incl. fixtures).....	200.00
Driveway, sidewalk, landscaping, grading, etc.....	150.00
Add for special hardware and railings.....	65.00

Total, Variable Items.....\$1,836.20

Upon figuring the material list for the superstructure as submitted by the builder, without mason supplies and special hardware, the dealer arrived at \$784.24, which was \$63.75 less than the \$847.99 he obtained by the Home Cost Service method. Something was wrong.

When the contractor returned the situation was explained and they went over the two estimates to see why they did not agree. In checking the material list they discovered that the contractor had figured only half the roof, intending to double it to get the correct amount of materials required. Because of his failure

to double there had been an omission of \$56.75, covering half the rafters, roof sheathing and asphalt shingles. This amount, when added to the \$784.24 figured by the dealer as cost of the lumber made a total of \$840.99—just \$7.00 less than the estimate as figured by the Home Cost Service method.

"That's what I call bringing them out close—and you notice it came out on the 'safe' side," exclaimed the dealer emphatically.

"Yes, and I've learned something today," replied the builder. "How long did it take you to figure the job this short way?"

"I didn't time myself, but I know it was less than ten minutes, and the next job I can figure much faster. And the pretty part of this plan is that it caught a mistake that saved you some money."

"No more material lists for me," continued the contractor. "I'm coming in here and get the costs first. Say, why couldn't we do this? Every month I'll come in with my copy of AMERICAN BUILDER AND BUILDING AGE and have you tell me what it will cost to build all the houses they show. Then I can really work on some prospects, because the first question they ask is, 'How much will it cost?' Will you do that?"

"Sure, I'll be glad to do it. I can give you a quotation on the materials only, or with your labor figured in, whichever way you want. I'm sold on this idea now that I've seen it work on an actual job."

In this way another contractor and dealer got together and are using Home Cost Service. This plan will save them many hours of unnecessary estimating on jobs that may or may not be sold, and what is more, they can give prompt, dependable building cost information to prospective home owners—service such as they never could give before.

To Help You Make the Most of Our House Design Section

On the following pages are shown elevations and floor plans of some of the nation's most popular houses.

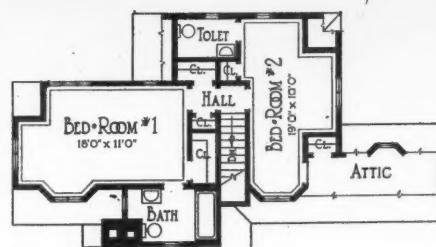
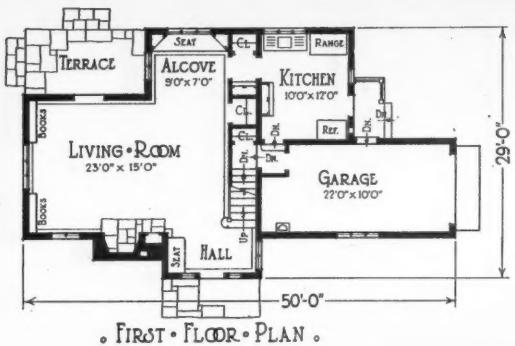
Of course you can just look at these and pass on. But they can be put to practical use. Using the new Builder-Dealer Home Cost Service the cost can be quickly figured. These designs can then be used in first-hand selling. A price can be quoted at once.

Space limitations make it necessary for us to show floor plans at reduced size. They are drawn accurately to scale. A larger plan may be secured by simply enlarging to the desired size and scale by the photostat process.

THE full page illustration at right is a well proportioned, interestingly worked out detail of a California home designed by David Ogilvie of Pasadena. Miles Berne is the photographer.

l pro-
ail of
vie of
r.





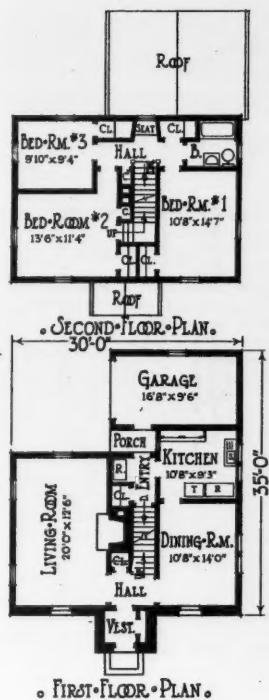
George F. Root,
3rd, New York architect designed
this pleasant stucco English home at
Bronxville.

Attractive Entrance-Way

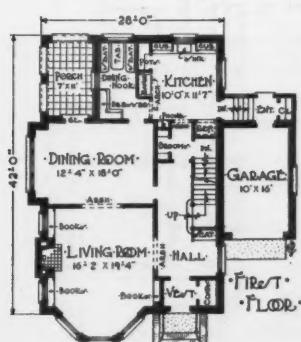
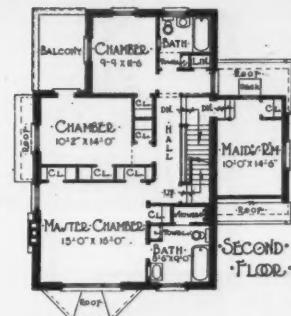
A spacious house that hugs the ground. The plan is simple but very appealing, with its large hall and wide dining alcove. Cost Key is 2.113 — 158 — 750 — 34 — 25 — 18.



Combines Stone Stucco, Shingles

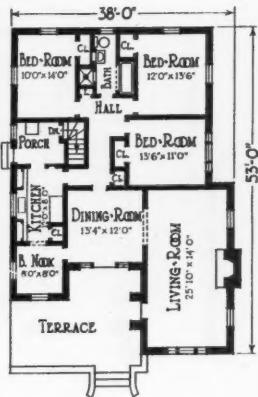


Although a small house, the interesting treatment of exterior makes it look big. Cost Key is 1.763—148—812—36—24—15. R. C. Hunter, architect.

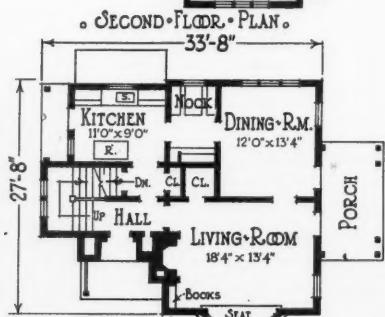
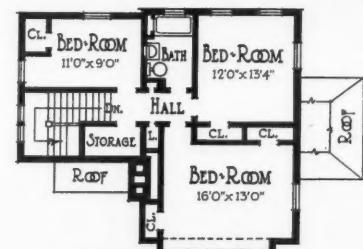
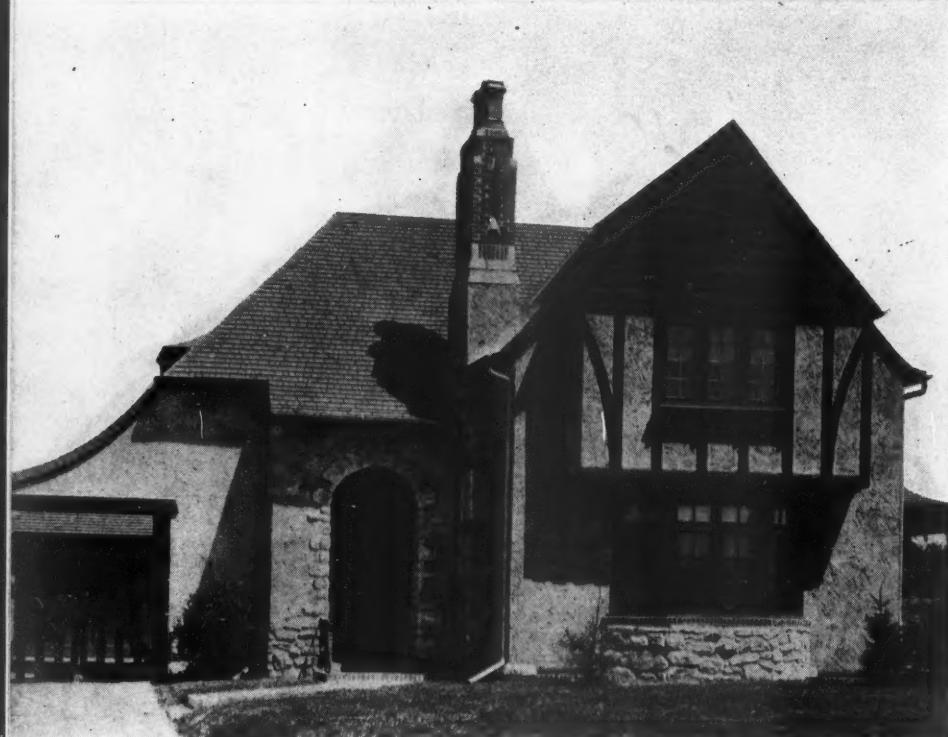


A practical plan with a charming front window that gives Colonial charm to the living room. Cost Key is 2.490—172—1144—49—34—20.

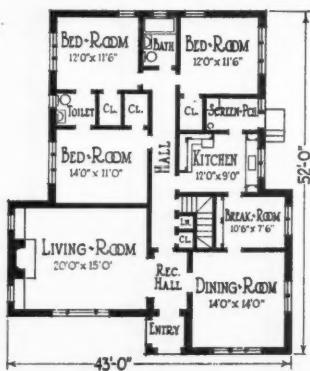
Houses for Every Type of Family



Brick bungalow from California. Cost Key 1.856—192—1658—68—21—21. A. B. Cleveland, architect.



Popular English type. Architects' Small House Service Bureau design No. 6-A-64. Cost Key is 1.867—126—762—29—21—15.



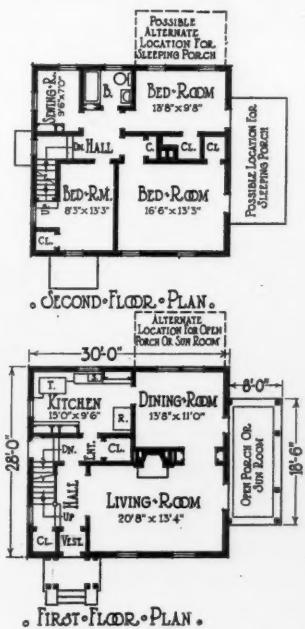
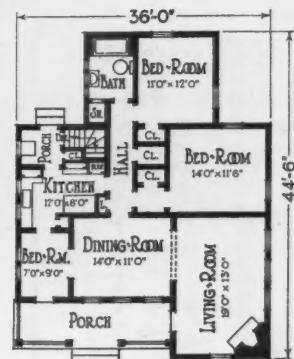
Interesting brick work in a western home built by De Luxe Building Company. Cost Key is 1.947—200—1770—73—21—29.



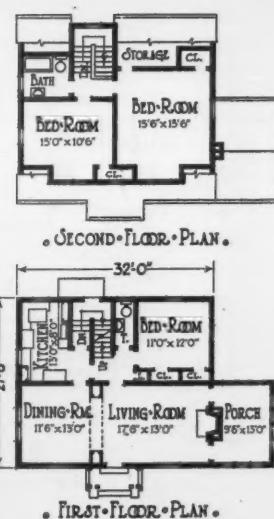
Popular Types with Efficient Plans



Stucco cottage with open porch designed by A. B. Cleveland. Cost Key 1.434—161—1212—51—17—16.

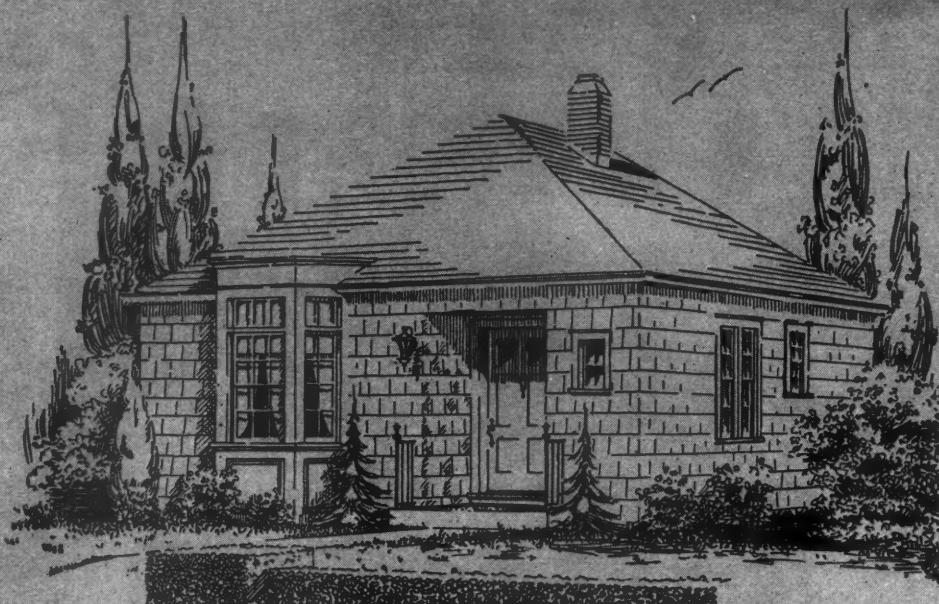
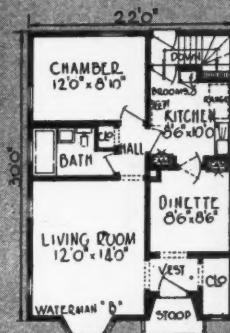


A. S. H. B. design No. 6-A-74. Cost Key is 1.775—116—840—36—24—13.

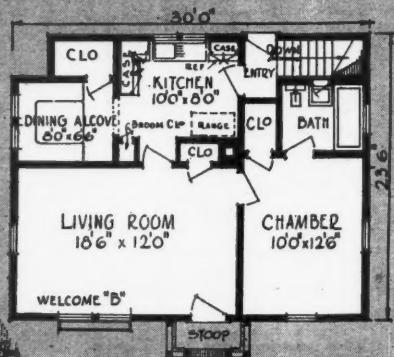
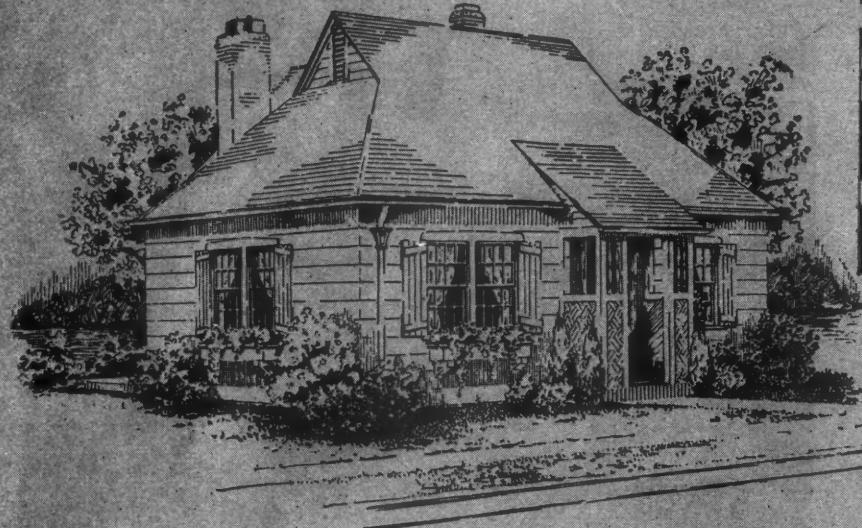


Likable Colonial, A. S. H. B. design No. 6-A-48. Cost Key is 1.868—140—1036—44—22—16.

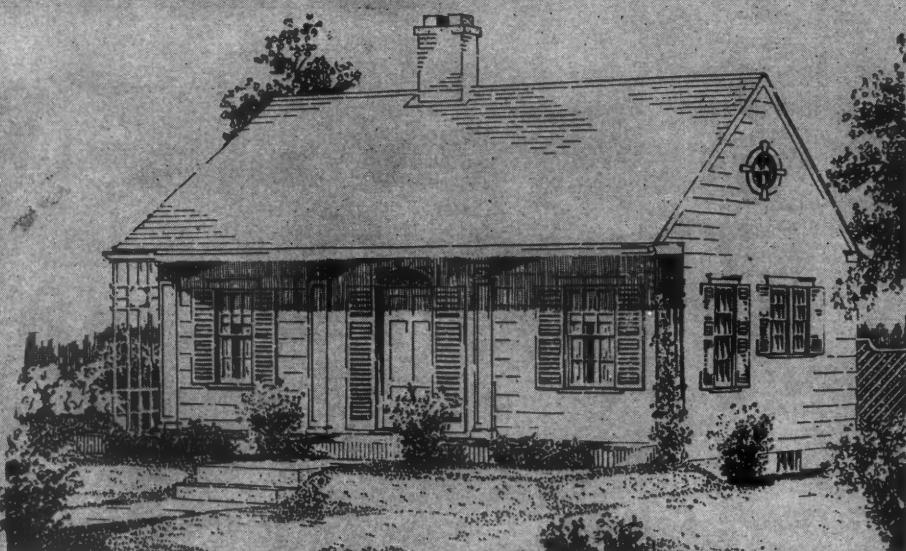
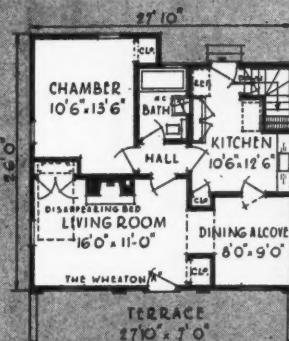
**Efficient,
Low In Cost**



Apartment efficiency in a small house Cost Key .862—108—674—29—10—10.



The big living room appeals. Cost Key .921—
107—710—30—10
—12.



Compact Colonial
with overhanging roof.
Cost Key .912—108—
714—30—13—10.

National Plan Service Designs

How Washington Builder Sells Old Houses

ONE of the most interesting subjects discussed at the recent annual convention of the National Association of Real Estate Boards was the old house problem. Speaking before the home builders and subdividers' division, W. C. Miller, president of the W. C. and A. N. Miller Development Co. of Washington, D. C., said that before the decision is made to recondition and modernize an old house, a thorough study is made of its rental and sales possibilities, future value, future condition of the locality in which it is situated, etc.

The appraisal sheet shown at the right is used in arriving at the decision whether the work should go ahead. A repair man makes an estimate as to what it would cost to put the property in salable condition. Consideration of the appraisal report is then given to decide how much money should be spent. This varies from \$300 to \$3,000, depending on the property and the condition, said Mr. Miller.

Mr. Miller's organization does both building and developing. It has a repair crew which goes into the house and gives it a thorough renovation. This work includes new paper, paint, refinishing the floors, refinishing lighting fixtures, replacing switch plates, refinishing hardware, new kitchen equipment, window shades, modernizing the bathrooms, etc. The house is put in spick and span condition.

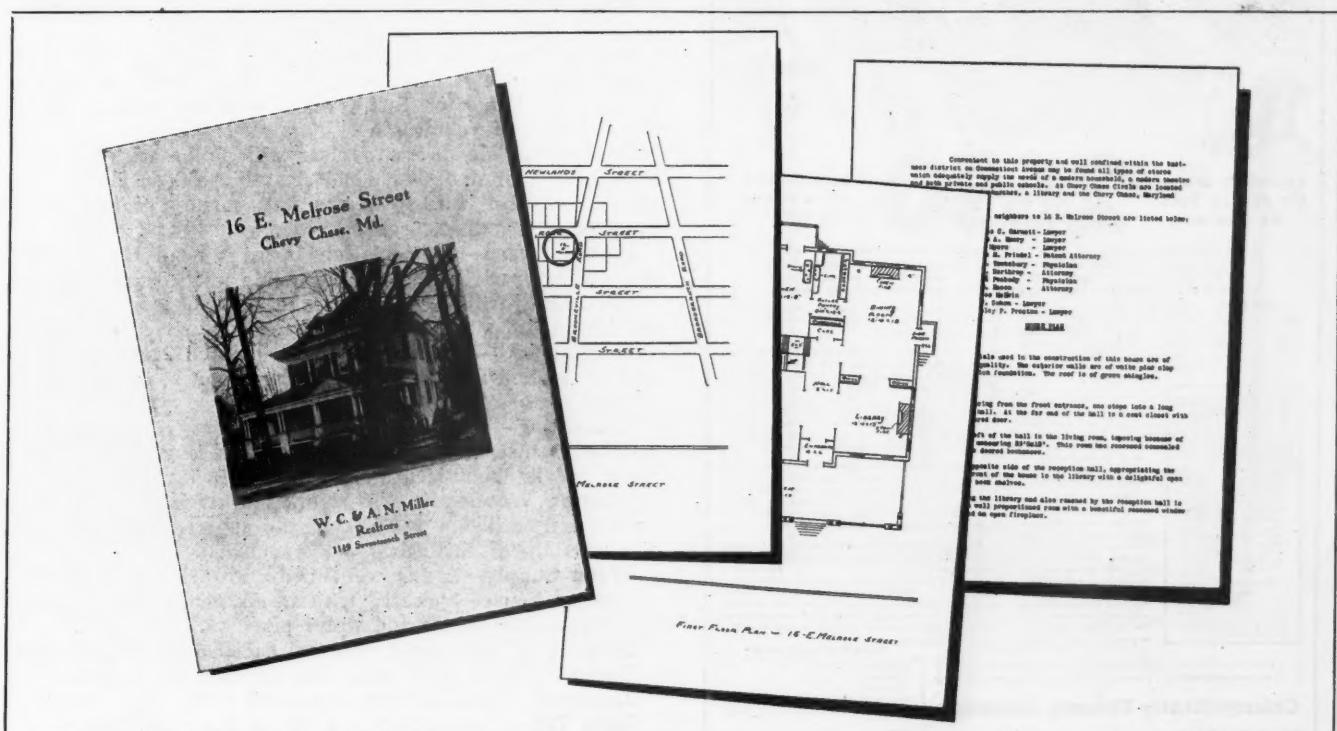
Before renting the property, a vigorous attempt is made to sell it. An 8½x11 booklet is made up by the planograph process, a new method to many builders and realtors, but one that enables preparation of such a booklet at low cost. This one has 8 pages with a picture

W. C. & A. N. MILLER
1115 Seventeenth Street, Washington, D. C.

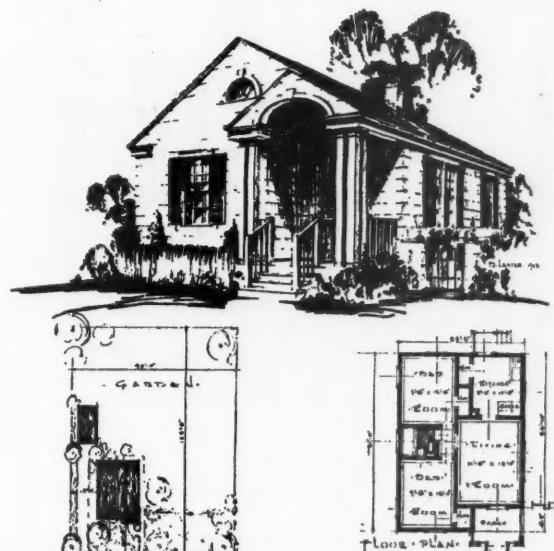
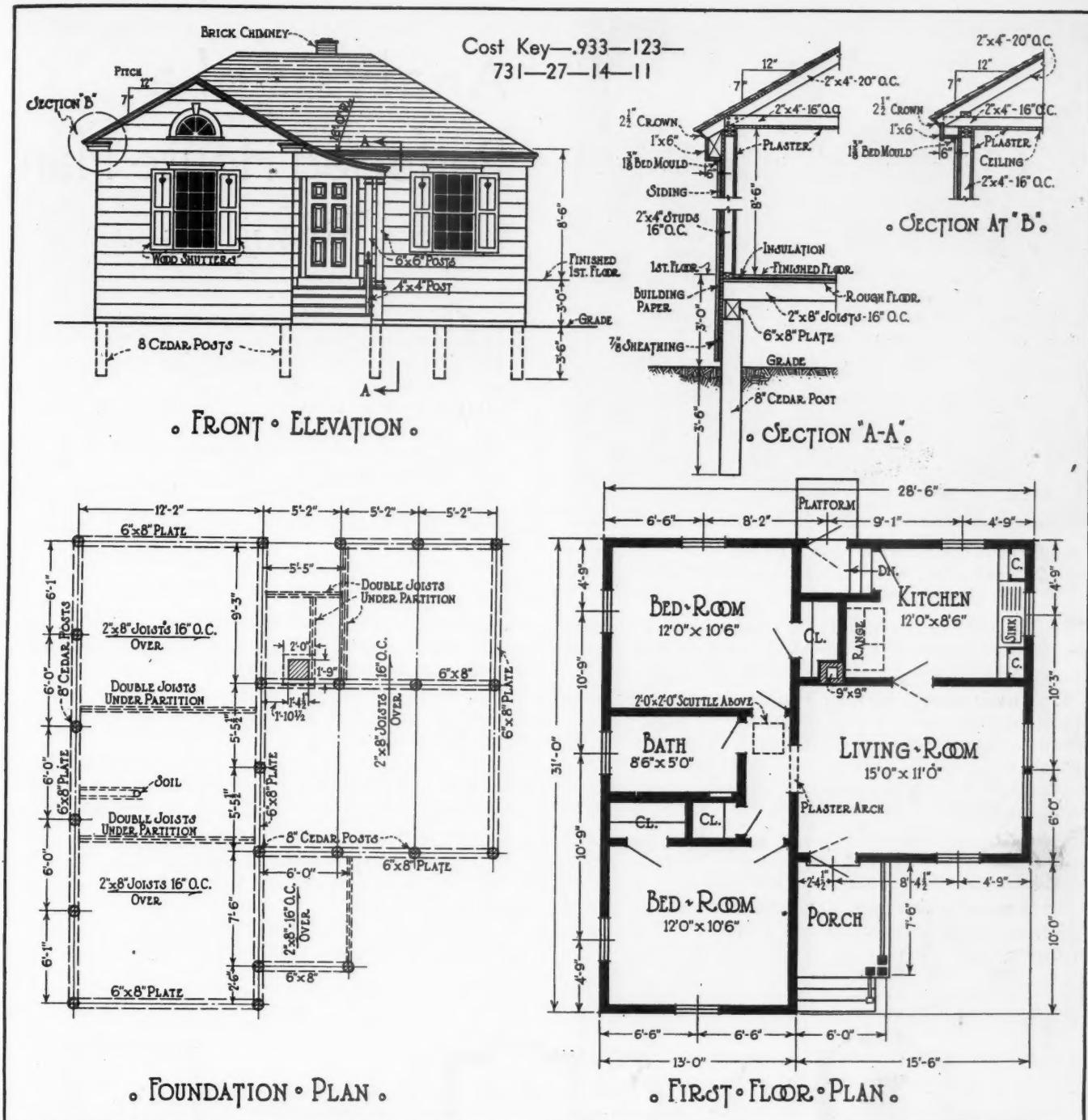
House No. _____ Lot No. _____
Street No. _____
Size of lot _____
Br. ft. in lot around @ \$ _____
Ground covered @ \$ _____
Improvement covered @ \$ _____
Total improvement @ \$ _____
Date improvement @ \$ _____
Date of appraisal @ \$ _____
Date of sale @ \$ _____
Main portion of house _____
Condition of exterior _____
Condition of interior _____
Age _____
Rooms on each floor _____
Bathrooms _____
Condition of neighborhood _____
In my opinion requires no repair or maintenance @ \$ _____
In my opinion property should have no consideration @ \$ _____
O.K. to report on per valuation _____
We have personally examined the property herein described and are of the opinion that it is worth the amount stated below and consider a reasonable @ \$ _____
APPRAISEMENT REPORT
Land, \$ _____
Building, \$ _____
Garage, \$ _____
Total, \$ _____
Cost to Repairhouse
Furnishings
Ground work
Normal paint
Corrugated chimney
Copper pipe
Total price
Dated at _____
Appraiser _____
Ex. - Appraiser's Remarks:

Appraisal sheet used in determining amount to be spent in repairing property.

of the property on the cover, which is of heavy green paper. These 8 pages are used to describe the property and the location is given, floor plans, analysis of locality, construction details, etc. One hundred of these cost about \$30.00, Mr. Miller said, and they are distributed to the one hundred best real estate firms in town. If the property does not sell within a reasonable length of time, it is then rented, preferably on a long term lease.



100 copies of this 8-page booklet were produced by planograph process for only \$30 and distributed to leading realtors. Location, floor plans, photograph and complete description of property for sale are given.



Each of these little homes is offered at \$1650 for the building plus \$1000 for the 90x125 foot plot. "A garden and independence", together with low present-day costs, are the sales lure of this development. Working drawings above show details of construction of all designs. The floor plan is of the \$1750 house illustrated on the page opposite.



Type C-11 is somewhat smaller than the basic plan, being only 22 feet wide, but follows its general arrangement.

FROM the standpoint of the builder and developer, it would seem that the ideal house is one which possesses most of the following characteristics:

1. A basic plan to be used as a development for individual requirements. The arrangement of plan, the external appearance and the details of the house should appeal to a large percentage of prospective home buyers, and all matters which might elicit unfavorable comment or offer any sales resistance should be eliminated.
2. A house which has been developed with every consideration for economical construction.
3. A house which provides the maximum of livable space, convenience, comfort and privacy, and economy in management.

Analysis of a Perfected House Plan

By JOHN A. AHLERS, A.I.A.

ARCHITECT Ahlers was commissioned by the Roland Park company, Baltimore builders and developers, to study and perfect a house to sell at from \$9,000 to \$12,000. The basic plan he evolved represents the latest thought in efficient design and has been widely praised. The following analysis was made in a paper presented at the recent convention of the Real Estate boards at Cincinnati. Houses shown were built in Northwood, an attractive subdivision near Baltimore.

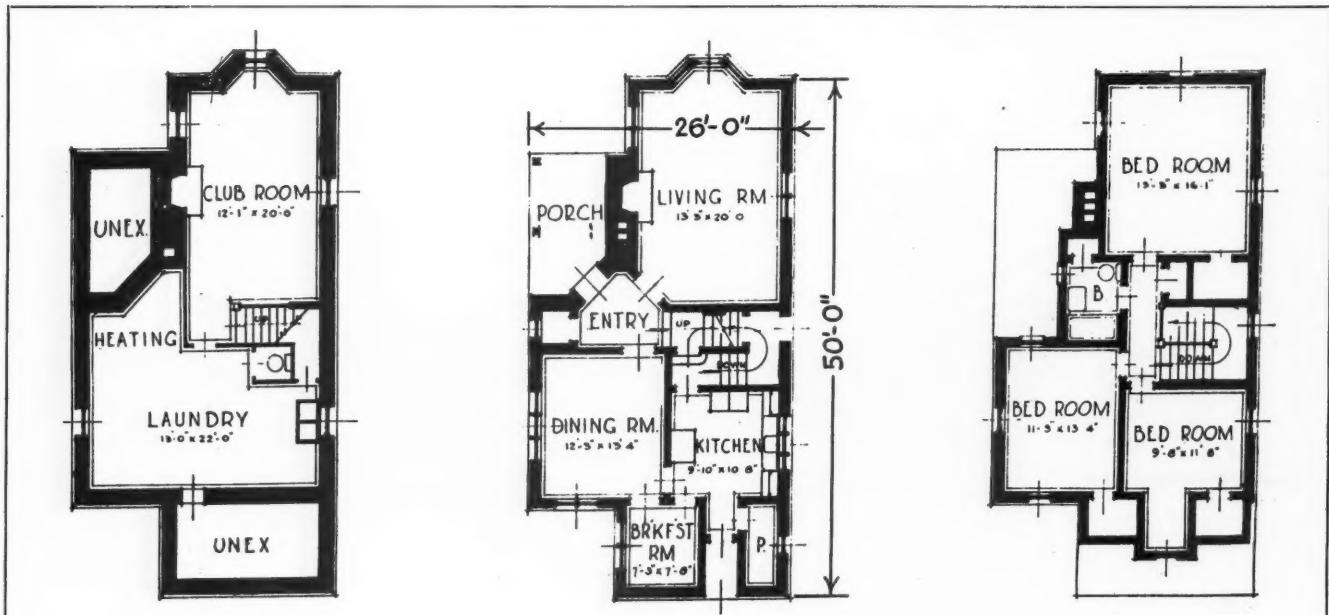
4. A house which can be adapted to a very narrow lot and which may as well be used on a piece of property of more generous dimensions.

5. A house which can be equally well used on the corner lots at road intersections and on the lots between such intersections.

6. A house, the plan of which, considered as a basic plan, will allow flexibility to give the developer the opportunity to build with such plan variations and additions as prospects may desire.

7. A house which may allow such external variations as will prevent the monotony which repetition is likely to carry with it.

While the total floor area must be kept at a minimum, the livable room areas must be made as spacious



This is the basic floor plan, type C-1, which was adopted by the Roland Park company after months of study. It is an unusually fine arrangement for a small house on a narrow lot, is flexible and allows variations to avoid monotony. Front entry connects with back door and every important room.



Two of the type C-1 houses built according to plans on opposite page but given different exteriors. None of the Roland Park homes look alike. By reversing plans, changing lot arrangement and varying exterior details individuality is maintained.

and as generous as possible and should be full of light, sunshine and air. This of course implies that we give as little of our floor space to those areas which only serve the purpose of communication. This should make for a compact plan, with the least possible space given to stairs and hallways. In talking over house plans with women, one has become accustomed to hearing the wish expressed that there be less unnecessary space to take care of.

The program or schedule of requirements from which our basic plan and design were developed was as follows:

In general, a basic plan, which should have an economical layout from considerations of construction and house management. The plan should possess versatility in adaptation to characteristics of various sites, and should have great flexibility as to plan arrangement and expansion. The requirements of the house in terms of rooms were as follows:

Basement:

Club room with wood burning fireplace. Direct access to this room from the first floor and from the exterior without going through any other basement area.

Laundry space.

Area for heating plant.

Basement area for storage. There was for a while a tendency to eliminate cellars or basements entirely, until the so-called club room came into demand. The advent of the club room is of course based somewhat on the development of the more modern methods of heating. This club room provides a playroom for the children in all kinds of weather, and the many uses to which this room may be put by the members of the family I need not enumerate. This room has been made possible at a cost far less than a similar accommodation could have been provided above ground.

First Floor:

Porch (open or enclosed) or terrace without adding to the width of the house or lot requirements.

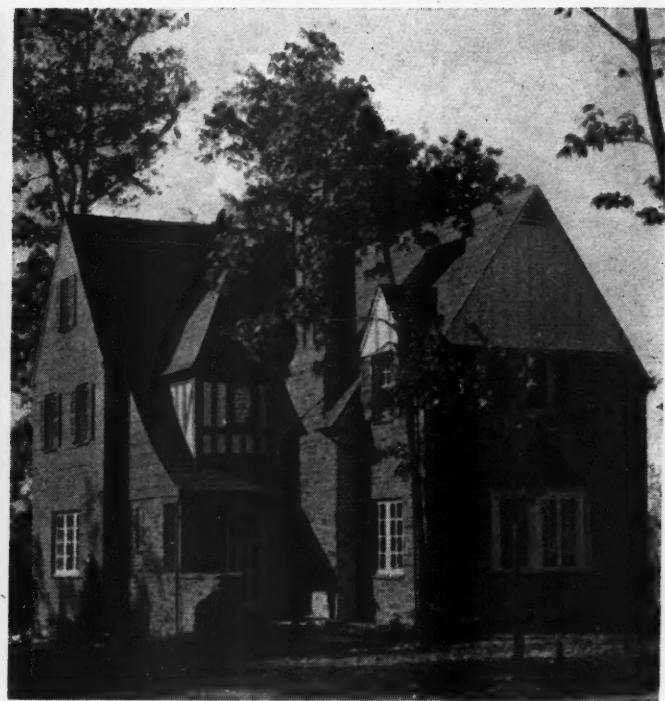
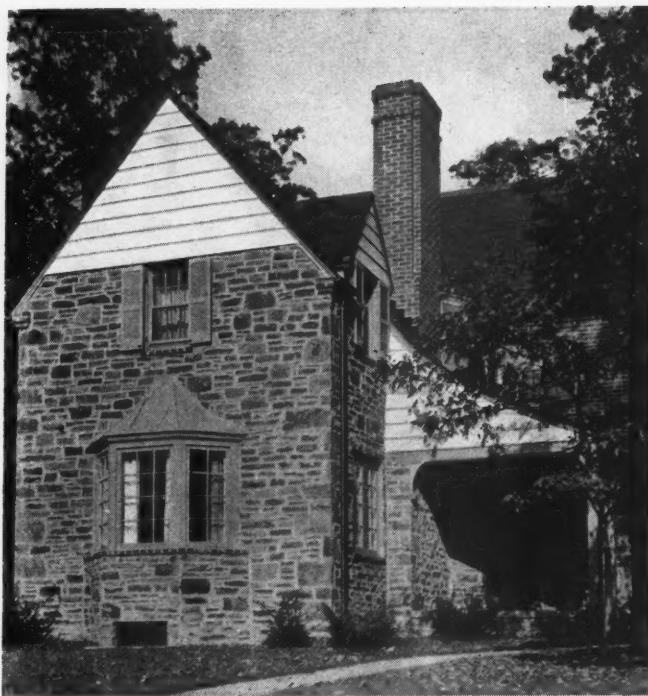
Entrance hall, just large enough to serve the purpose of providing a buffer to the rest of the house. Space for hall table and coat closet, available from various rooms without disturbance to other rooms.



Another C-1 type house with exterior finished in stone, brick, and wide siding. Open porch was specified.



Although following the general basic plan, this house, type C-2 has a third story, and is modified with an enclosed porch. Third floor layout is shown on page 34.



At left is type C-4, a bigger house with basic floor plan expanded to include third floor and three bathrooms (plan below). At right is an interesting design combining features of types C-2 and C-3 in stone, stucco and siding.

Living Room: Cross ventilation. Visibility. Ample in size. Privacy. Open fireplace. This room will be light and airy and to provide sufficient wall space for various schemes of furnishing.

Dining Room: Ideal furniture location. Relation to kitchen. Privacy. Cross ventilation.

Breakfast Room: Flexibility of this room so that it could be used for study, den or various purposes. Relation to kitchen and to the rest of the house.

Kitchen: This to be a large and cheerful room. The demands of the public in our locality do not yet confirm the opinion that as small a kitchen as possible is desirable. It should be light, airy and conveniently arranged, with pleasant outlook and well ventilated. It should have a trades entrance, a small kitchen porch and ample pantry accommodations.

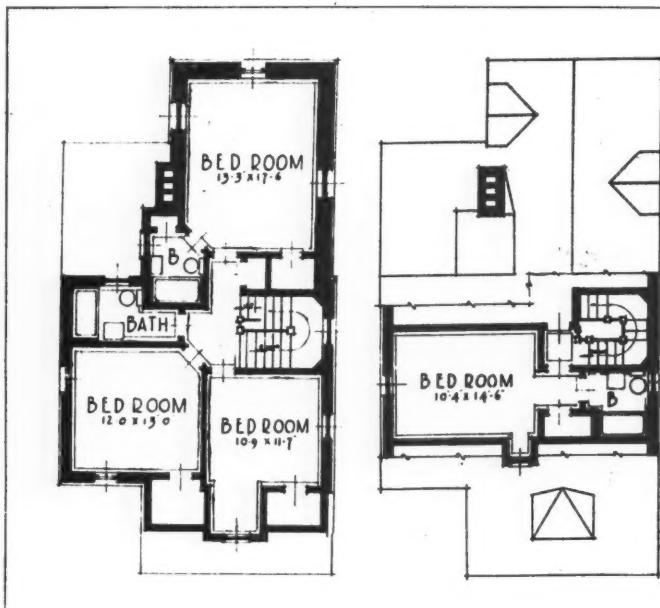
Second Floor:

The second floor requirements consist of: three bedrooms; one bath or two baths.

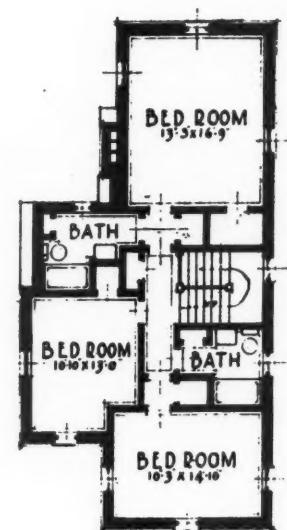
Third Floor:

The third floor requirements consist of: possible bedroom; possible bath; storage.

Features of the basic plan include: fits narrow lot or corner lot; large living room; access to living room, dining room, kitchen, stairs and front and back doors all from small front entry; open porch; no waste space; cross ventilation and plenty of windows in every room; permits easy change of both interior and exterior to suit different people without seriously altering plan; two baths may be installed in second floor by utilizing space over porch; very simple cornice, trim, exterior details that reduce cost. Enough houses based on this plan have been built in Northwood to test its workability thoroughly under varying conditions.



At left are the second and third floor plans of type C-4 house which provide three bathrooms. Third floor plan applies also to type C-2 on page 33.



At right is the second floor plan of type C-3 house which provides two bathrooms instead of one. Otherwise floor plan is similar to basic plan C-1.

Modernizing details for a panelled Basement Playroom

ACCORDING to G. L. Bartels, research director of the Douglas Fir Plywood Manufacturers Association, thousands of householders in all parts of the United States have expressed interest in basement modernizing and equipment for the basement. "This means," he says, "that carpenters, contractors, building material men in every community may profitably solicit their local home owners for remodeling jobs of this kind."

The association has issued construction details for basement modernizing, some of which are shown below.

Improvement of the basement room is a development made possible entirely by recent progress in building materials and equipment. Clean heating equipment, elimination of ashes and dirt and the sprucing up of the basement make it possible to put this valuable area to use. As a child's playroom, a club room, sports room or party room, it is especially valuable.

Dryness is of course a first essential, and is achieved by use of waterproofing materials now available. When dampness is unavoidable in the exterior wall, furring-out may be necessary behind the plywood interior sur-

face. The panel effects shown below make an especially pleasing appearance. Such work can be carried on at very low cost at the present price of materials and labor.

Following is the list of material called for in the modernizing detail shown below.

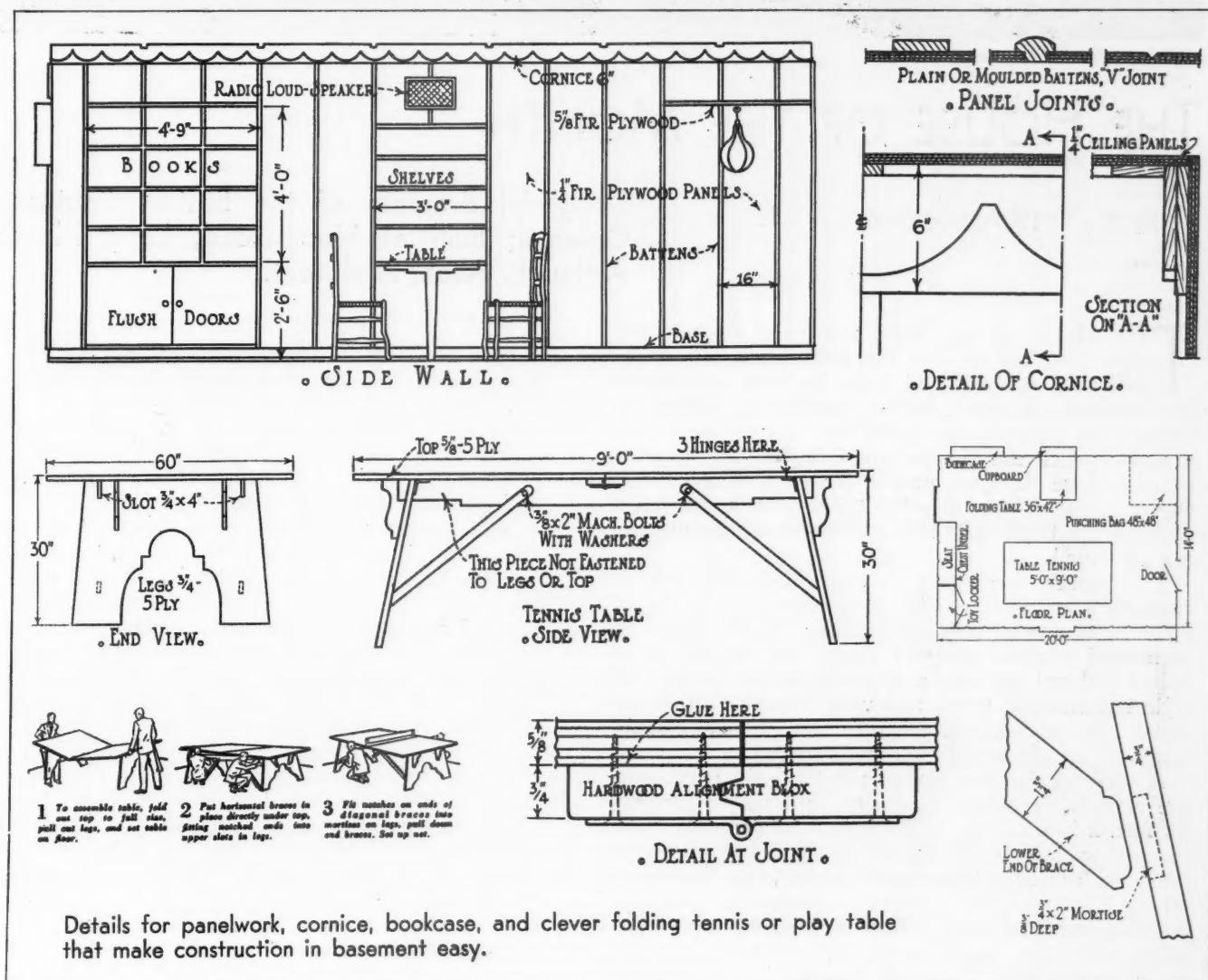
Wall panels for room 14'x20'x8'-18 panels $\frac{1}{4}$ " plywood 48"x96". Ceiling Panels for room 14'x20'-12 panels $\frac{1}{4}$ " plywood 48"x96". Cornice mould—68 linear feet. Base mould and base shoe—each 68 linear feet. Battens—600 linear feet.

Bookcase—7 pcs. $\frac{3}{4}$ "x9"x54"; 2 pcs. $\frac{3}{4}$ "x9"x48"; 2 pcs. $\frac{3}{4}$ "x9"x78"; 2 doors $\frac{3}{4}$ " plywood 24"x27".

Cupboard and table—2 pcs. $\frac{3}{4}$ "x9"x42"; 5 pcs. $\frac{3}{4}$ "x9"x36"; 1 table top $\frac{3}{4}$ " plywood 36"x42"; 1 apron and leg.

Folding tennis table—2 pcs. plywood $\frac{5}{8}$ "x60"x54", top; 2 pcs. plywood $\frac{3}{4}$ "x48"x30", legs; 4 pcs. lumber $\frac{3}{4}$ "x1 $\frac{3}{4}$ "x42", braces; 2 pcs. lumber $\frac{3}{4}$ "x5 $\frac{1}{2}$ "x96", top support; 1 pc. hardwood $\frac{3}{4}$ "x3"x24"; 4 machine bolts $\frac{3}{8}$ "x2"; 8 cut washers $\frac{3}{8}$ "; 5 pr. hinges, about 2"x2 $\frac{1}{2}$ "; 4 pr. small hinges for brackets.

A profitable field is offered by this type of work.



Details for panelwork, cornice, bookcase, and clever folding tennis or play table that make construction in basement easy.



THE HOUSE OF THE MONTH

Cost Key 2.267—132—867—37—27—18.

Delightful Example of the Stately Southern Colonial; Built at Hempstead, Long Island; Arthur E. Allen, Architect.

THE House of the Month series of designs, presented in each issue of this publication, is intended primarily as a monthly lesson in home architecture for architects, builders, dealers, realtors and others interested in home design problems. According to the program which the Editors are following in the selection of these designs, quite a range is covered each twelve months. Typical and praiseworthy examples of each of the traditional styles of domestic architecture are presented.

This month we have a Southern Colonial with the characteristic high veranda—roof supported by six tall columns. Evolved originally in the South where the high roof afforded grateful shade, yet because of its height did not prevent a free circulation of air, this style has traveled north and west wherever grace and stately dignity are appreciated. Our current example was built at Hempstead, Long Island.

A study of the floor plans on the opposite page shows the main body of this house to be a simple rectangle 22 feet, 2 inches deep by 36 feet, 8 inches wide. There are six well arranged rooms on the first and second floors with at least three rooms more to be finished off on the third floor. The central reception hall and stairway are wide and ample. The big clean basement space offers attractive opportunities for modern recreation room development, if such is desired.

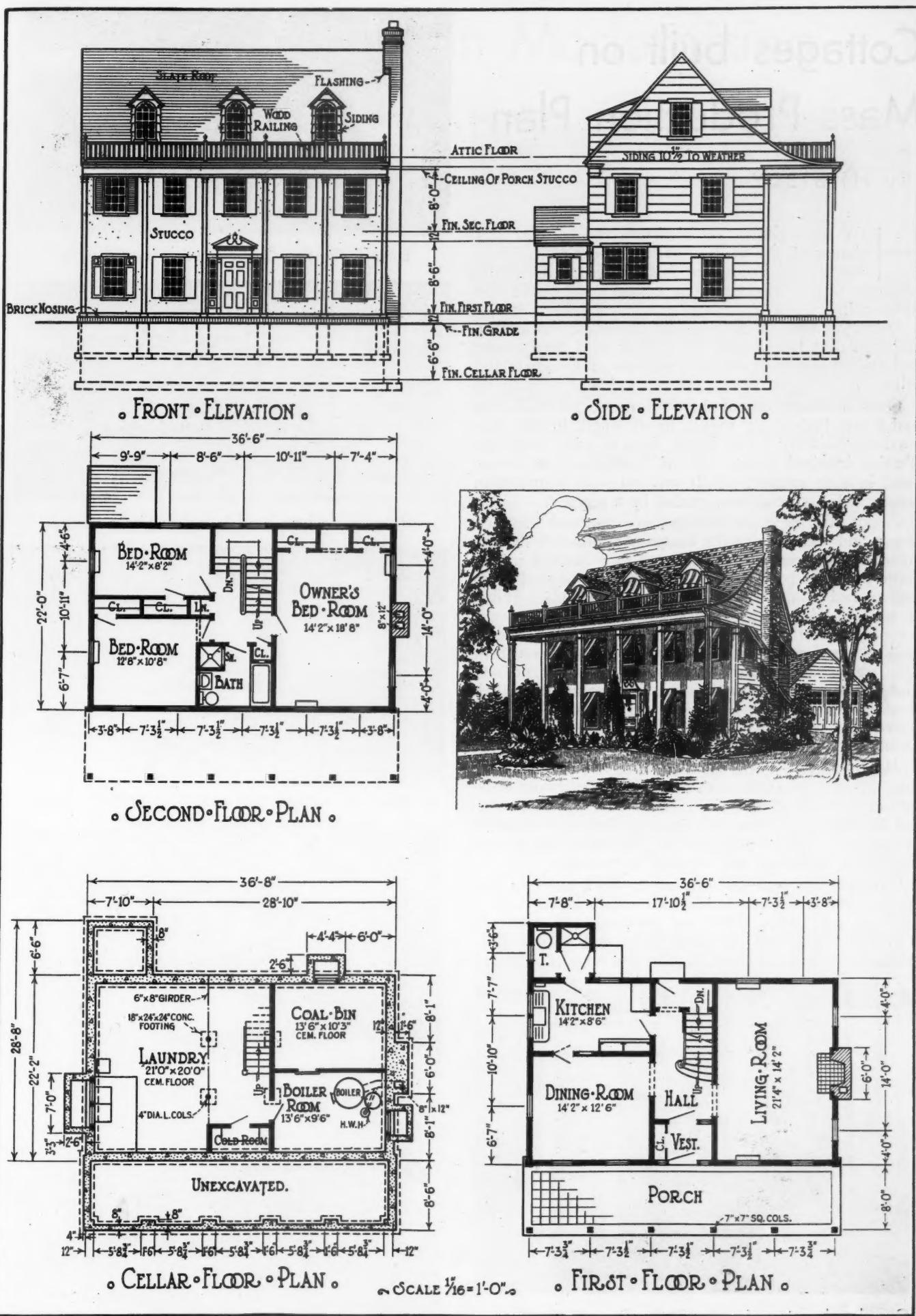
How to Use These Plans: Plans shown 1/16 inch to the foot, as these, are too small for practical use, either on the drafting board or to build from, no matter how sharp and clear they may be. The quickest and easiest way to enlarge these drawings is to put them under a camera and enlarge them four times.

An enlarged photograph or a photostat four times the size shown will bring these plans to 1/4 inch to the foot, the regular scale for working drawings. Changes and additions can then be worked out easily on the larger scale.

Students of drafting will find it excellent practice to lay these drawings down on the drafting board, four times the scale shown here, and draft out their own quarter-inch scale drawings. Check all dimensions.

From the drawings shown, work out the rear and side elevations and the roof plan. Draft out the important construction and trim details.

Every good builder builds on paper first. "Paper is patient," and the ability to prepare good drawings and to interpret blue prints quickly and accurately marks the qualified man in the building field.



Scale drawings, 1/16 inch equals 1 foot, of Southern Colonial Residence illustrated on opposite page.

Cottages built on Mass Production Plan

By H. SIBLY

HOW mass production of houses reduces cost was shown by the E. K. Wood Lumber Co. of Los Angeles in turning out 550 cottages to house the Olympic Games athletes. The cottages were sold for \$140 each.

"Straight line" production was employed, the lumber and insulation board going into a long work shed at one end and emerging as complete sections of houses at the other.

Over all dimensions of the cottages are 10 by 24 feet and 8 feet high at the eaves. Short length lumber was used exclusively, 1,740 board feet in each building. Twelve hundred square feet of insulation board were used in each cottage, which was cut with a minimum waste with a special saw, guided by a templet.

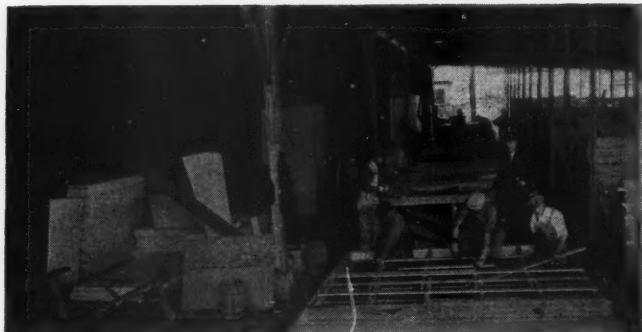
About 500 pieces of lumber were required for each house and were cut in the company's millwork department. They were then numbered and stacked in the large open assembly shed. Work tables extended from end to end of this shed, the top of each table forming a templet with grooves to admit required pieces for each house section. Two men worked at a table, rapidly nailing together the pieces of lumber. There were four side wall sections exactly alike and duplicate end sections. The roof was built in four sections and the porch roof in two sections. Framing is of two-by-three surfaced pine. An interesting feature is the mitred stud or corner post of the side frames.

When delivery to the Olympic fields was started, each load was timed so that units would arrive in proper order to permit rapid erection. Floor sections were delivered on the first truck, then side sections, then roof sections. Thus, work was co-ordinated so that there was no lost motion in unloading and erecting the cottages.

Cottages are neat and attractive. Each has two bedrooms with a shower bath between, two clothes closets and a wash basin. They are portable, and after the Olympic Games will be taken apart and sold to individuals. A large number of sales are already reported.



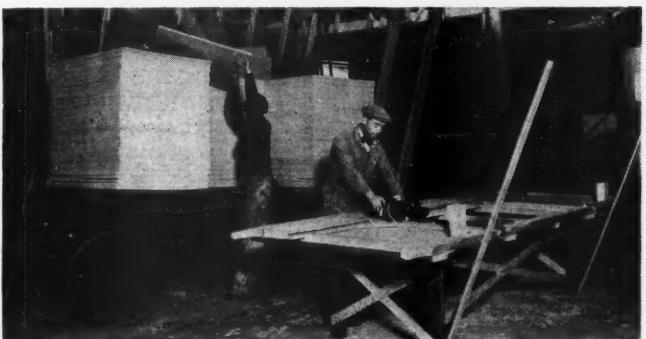
Completed cottage is 10 x 24 ft. Price \$140. Contains two bedrooms. Shower bath (left) and two closets are between the rooms.



Building the floor sections, using special tables



Templet or form used in building side frames



Special saw with templet used in cutting wall board



Assembling the roof frames in table top forms



Power Equipment in Modernizing

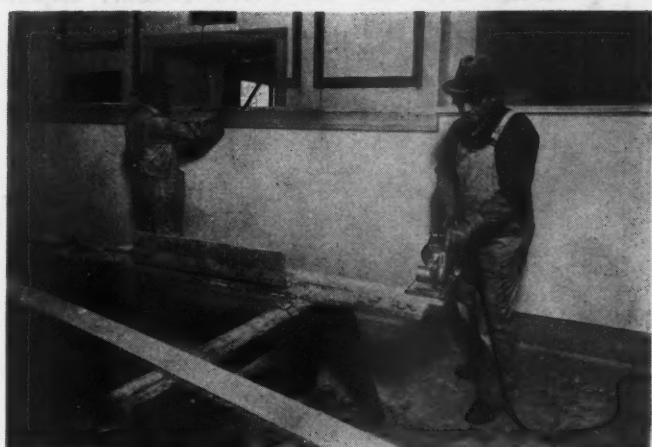
ANALYSIS of a number of the leading types of power equipment reveals helpful facts concerning the adaptability of such equipment to modernizing.

Modernizing work, the study shows, frequently calls for difficult cutting, drilling and grinding processes. Examination of power equipment demonstrates its especial usefulness in this connection. A number of new types of equipment have been developed which are designed to be helpful in repair work. A summary of the important types of power equipment with facts revealed by the survey concerning their application to modernizing are as follows:

POWER SAWS. An important development is the perfecting of special types of saw blades that will cut nails, metals of various kinds, brick, stone, marble, tile, transite, etc. The handling of old material has always been objectionable because of the nails, dirt and abrasive materials encountered. Hand power saws eliminate this trouble and are especially valuable because they will rip through long and difficult cutting operations with a speed impossible by hand.

An example is the operation, often encountered in modernizing, of cutting off the entire end of a room, including old flooring, joists, side walls, etc. Numerous cases are cited where this type of work is done with maximum speed with power saws equipped with special blades that are not affected by nails or abrasives.

Portability of new types of saws is another feature that makes them especially useful in modernizing, the study shows. Many of the newer woodworking machines have been made easily portable without losing their workability in performing a wide range of cutting operations. Stands or holders for hand electric saws have been developed also which are useful in performing special operations, such as angle and bevel cutting. Modernization and repairing work often call for the cutting of special moulding, trim, shelving and other pieces that would be difficult, if not impossible, with an ordinary hand saw. This special work is performed quickly and inexpensively with the portable power woodworker.



Power saws in use on an extensive alteration job that required volume cutting.

DRILLS. Extension of the use of the power drill has made it one of the most versatile instruments, and especially valuable in difficult situations produced in modernizing. A valuable attachment is the hole saw which cuts holes up to 3 inches in size quickly and without great labor on the part of the operator. The drill is quickly convertible into a grinding, polishing or buffing machine, useful in restoring old stone or brick surfaces.

Various types of extension pieces have been developed for use with the drill. One of these is for drilling holes in the ceiling. A portable bench drill stand converts the hand drill into a precision drill press for special work.

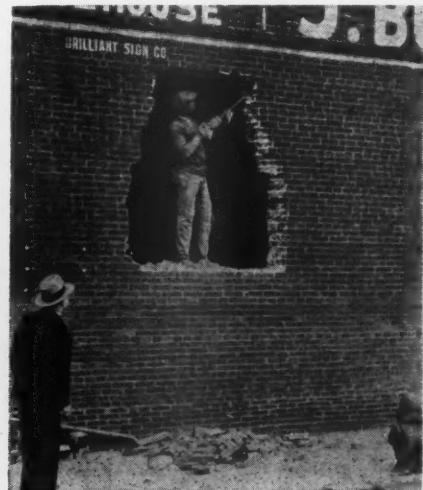
Space permits mention of only a few of the other important uses of power equipment in modernizing. Electric hammer tools, for example, are widely employed in chiseling out old concrete, dressing new concrete, refinishing stone and brick, cleaning, caulking, chiseling out cracks, etc. Scientific use of power equipment also makes possible a saving in material as old flooring, siding, joists, rough lumber, etc., may be re-cut and re-used in a practical way.



Chipping out concrete is a frequent modernizing job that is expensive without machine.



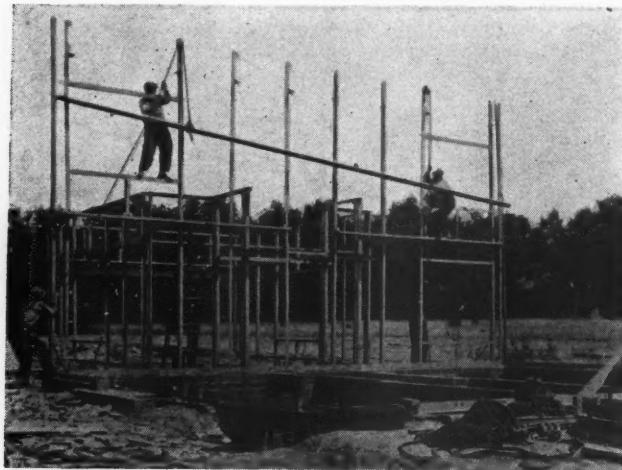
Spray paint equipment has a wide use in refinishing stucco exteriors.



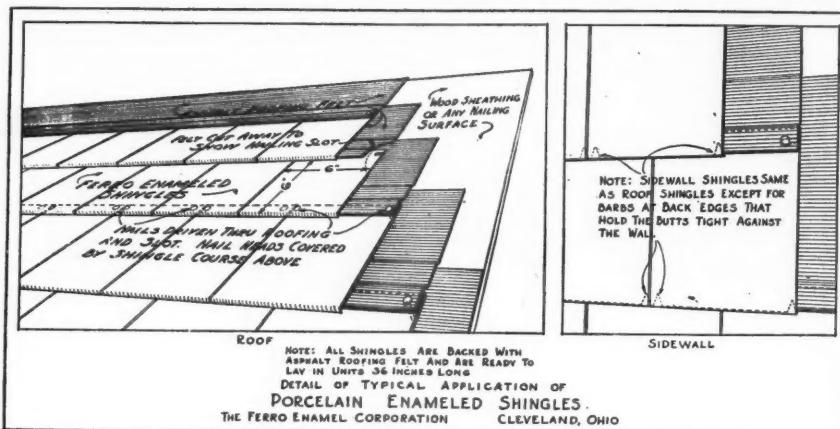
Alterations in brickwork performed at reduced cost with new type power hammer.

Details Changed for Porcelain Enameled House

THE construction finally decided upon and now being used for the Ferro Enamel experimental house on Campus Drive, Cleveland, differs materially from the earlier reports. (Page 49, June A. B. & B. A.) The new scheme is illustrated in the accompanying drawings. Instead of large porcelain enamel



Erecting the Steel Frame on July 6—Four men hoist the roof plate.



panels, as originally proposed, smaller shingle units are used on both roof and exterior walls. The backing for these shingles is a steel clad insulating board consisting of two sheets of 24-gauge steel confining $\frac{3}{4}$ inch of fiber insulation. A light steel framework of $3\frac{1}{2}'' \times 2\frac{1}{2}'' \times \frac{1}{4}''$ angles to which wood nailers are bolted serves as a base to which are spiked these steel clad sheets on the outside and the insulmesh or metal lath for plaster inside. The 4-inch space between is filled with mineral wool.

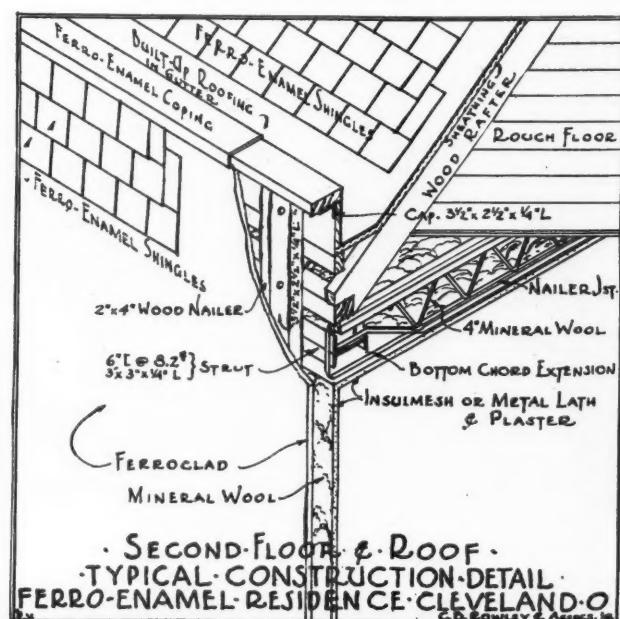
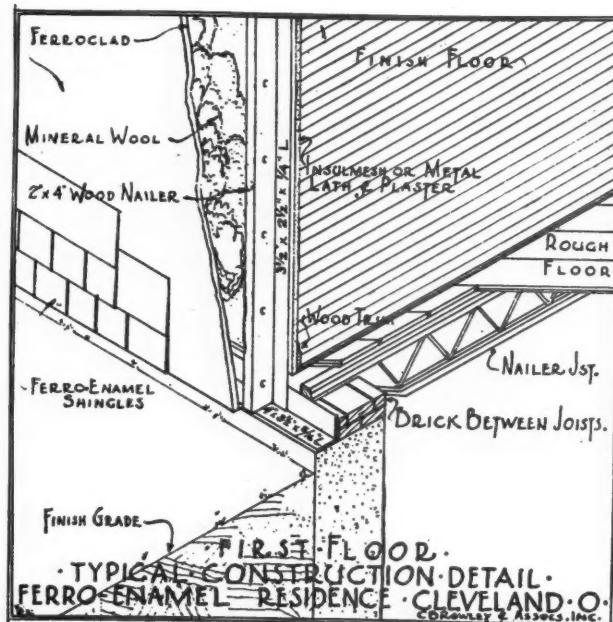
The spacing between the vertical frame members varies according to the placing of the windows, and in order to provide for mechanical details. This spacing never exceeds 4 feet. The vertical members are fastened to the sill plate with bolted clips and the corners are then welded.

The floors are typical bar-joist, wood-floor construction. The spacing of the floor joists varies in accord with the weight bearing partitions, but never exceeds 19" maximum. The minimum depth of these floor joists is 8".

The Ferro Enamel shingle developed for this house is a 6-unit strip 36 inches long. The problem of splintered enamel around the nail holes is solved by means of slots cut before enameling. The felt layer comes down over the nailing place to waterproof and cushion the nails. For sidewall use, an extra tab at each bottom corner of each shingle locks it to the course below, preventing looseness or flapping. To fasten the shingles to the side wall, a 6-penny nail is used. This is driven completely through the steel clad sheet and clinched in back, thus serving a double purpose of making the shingles absolutely secure, and of binding the steel clad.

Charles Bacon Rowley and Associates, Cleveland, are architects and engineers, and George L. Dubin of Cleveland is contractor for this Ferro Enamel Corporation experimental house. A similar piece of construction is expected to be erected for the Chicago Fair.

Details of side wall, floor, ceiling and roof construction being used on Cleveland's experimental steel house.



NEWS—building activities of the month

Realtors Hold Annual Meeting

HIGH taxes, financing, modernizing, construction progress were among the important subjects thoroughly discussed at the annual convention of the National Association of Real Estate Boards at Cincinnati June 29 to July 1.

W. C. Miller, prominent home builder and realtor of Washington, D. C., was elected 1933 president of the association to take office January 1. Another election of especial interest to readers of *AMERICAN BUILDER AND BUILDING AGE* is that of Guy T. O. Hollyday as chairman of the Home Builders and Subdividers Division.

Highlights of some of the important discussion are as follows:

TAXATION: Suggestions for relieving the real estate tax burden were made by Senator Seabury C. Mastick, of New York, who is active in that state in taxation reform. Co-ordination of federal and state taxes, elimination of overlapping, segregation of sources of revenue was recommended.

"Present inequitable taxation of real estate which in New York state represents 30 per cent of the wealth of the state, but is carrying 69.5 per cent of the taxes, seriously affects property," he said.

The New York Tax Commission, he said, is under a mandate to reduce real estate's proportion of the taxes to 55.5 per cent. They have recommended new taxes in other fields and state control of local tax expenditures.

The North Carolina tax plan, he said, provides that before any bonds or notes are issued by county, city, town, village, township or school districts, a state commission must consider application for the issue and determine whether it is necessary and expedient.

"Control of local expense should, in some measure, be removed from the sphere of local influence and seems to be the only way to curb unnecessary, unwise or extravagant expenditure of public funds," he said.

Senator Robert A. Taft of Ohio described that states new, unique law for the taxing of intangible property. This law was designed to alleviate the excessive tax burden carried by real estate.

The tax operates not by taxing the value of the property, but by taxing the income which that particular intangible paid during the year.

Specific suggestions for tax relief were made by Simon E. Leland, associate professor of economics at the University of Chicago.

"The burden on the general taxpayer is due, in large part, to the fact that the antequated property tax system is not universal and that the tax base is not broad enough for an equitable distribution of taxes," he said.



W. C. Miller, prominent Washington builder, elected 1933 president of Realtor's Association



Guy T. O. Hollyday, Baltimore, elected chairman of Home Builders and Subdividers Division

"This condition can only be corrected by the development of a diversified tax base in which the income tax plays a large part. This tax should be so developed that every citizen will be called upon to make some direct contribution to the support of government.

"Further savings in property taxes can be accomplished by more general transfer of the functions of local governments to county governments. The township should be abolished and its functions should be transferred to the counties. Many of the county functions should be transferred to the state. Roads and education, for example, can be transferred to the state with substantial gains in economy and efficiency. Such a step was taken by North Carolina in 1931. Finally, greater simplification and consolidation of governmental agencies is recommended."

FINANCING: Ways in which the Home Loan Bank Bill will aid real estate and building were shown at the convention. Release of funds by banks and insurance companies for home building was urged and increasing instances where this is being done were pointed out.

MODERNIZING: A resolution was adopted by the convention urging realtors to promote modernizing and rehabilitation work. The present low cost of repairing properties makes it an excellent time to do work of this kind, the resolution declares, and such work will enhance their value and will be of benefit to the neighborhood and the community.

Leonard P. Reaume, head of the Real Estate Department of the Detroit Trust Company, described the modernizing of repossessed properties in Detroit. He said his firm is doing this work 25 houses at a time.

"Over 44 per cent of the 181,667 single family homes in Detroit, over 48 per cent of our 56,360 two-flats, and over 37 per cent of our 30,900 apartment houses, are more than 17 years old," he declared.

It is evident that these houses need to be modernized in order to attract the attention of prospective renters and purchasers, he said.

Modernizing work must be done thoroughly, Mr. Reaume pointed out, and told how he secures a letter from the contractors who do the work, stating that the equipment is in first class condition and is guaranteed by them. These letters are framed and placed in a prominent location in the home.

Modernizing includes tile bathrooms, tile kitchen sinks, rubber tile floors, in the kitchenn, iceless refrigeration, new kitchen stoves, new electric light fixtures, hardware, etc., he said.

Raymond Connolly, who is handling real estate of the Fidelity Union Title & Mortgage Guarantee Co., in Newark, N. J., described the rehabilitation of properties for his firm which puts them in salable condition.

"We found on various occasions that where we tried to sell a house in its old condition, we did not even get an offer," he said. "We had no trouble selling them, however, once they were reconditioned."

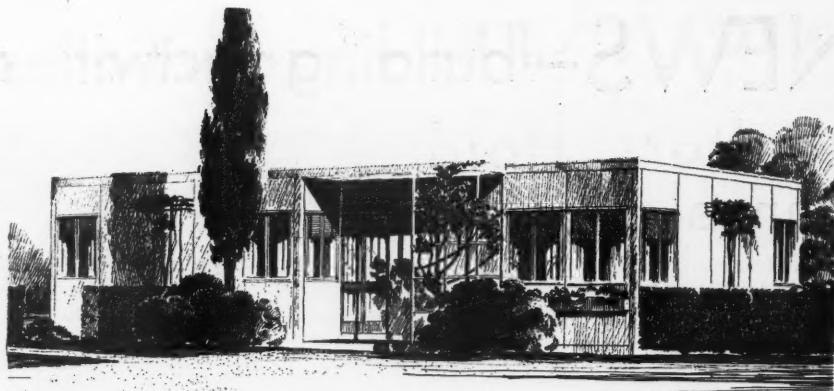
CONSTRUCTION PROGRESS: Several speakers described interesting developments in home buildings. James F. Taylor of the U. S. Department of Commerce described new economies in materials for construction and told how new products are producing better homes at lower cost. A highly visionary description of the "assembled" steel house of the future was made by Architect Frank Lloyd Wright who predicted radical changes in housing.

New Steel House Company Formed

GENERAL Houses, Inc., Howard T. Fisher, architect, with office at 120 S. LaSalle St., Chicago, is projecting a house of pressed steel construction intended for factory mass production. Claims of revolutionary methods and cost savings are made in the newspaper publicity which has already been sent out, although the producers do not expect to have the house ready to market for about a year and a half. A demonstration house is to be erected at the Chicago Century of Progress Exposition next year.

The co-operation of eight well known building supply manufacturers has been secured to furnish the required materials: Pullman Car & Mfg. Corp., the pressed steel panels for walls, floors and roofs. The Concrete Engineering Co., foundations; Curtis Co.'s, Inc., interior wood trim and millwork; General Electric Co., electric wiring, lighting and refrigeration; Pittsburgh Plate Glass Co., glass and paint; Container Corp. of America, insulation, including finished wall surfaces, ceilings and interior partitions; American Radiator & Standard Sanitary Corp., heating, air conditioning and plumbing; Thomas A. Edison, Inc., cement.

The house is still in the early experimental stage. Design details are being worked out on the basis of standard panels of pressed steel and heavy insulation fabricated at the factory and assembled on the job.



Proposed steel house to be erected at Century of Progress Exposition in Chicago by General Houses, Inc. Plans are still in early experimental stage.

Current Construction Figures

BUILDING permits in 556 cities and towns of the United States during the month of June, 1932, amounted to \$38,151,019, according to official reports made to S. W. Straus & Co. This figure represents a 12 per cent decline from May, 1932, when the volume for these cities was \$43,347,359, as compared with a normal seasonal expected increase of 6.1 per cent. Permits issued during June, 1932, fell 67 per cent below the same month of 1931.

The 25 cities, as a group, reporting the largest volume of permits for June, show an increase of 16.8 per cent over May, 1932, a decline of 62 per cent

from June, 1931, and a decline of 74.5 per cent from June, 1930.

Eight of these cities made individual gains over June, 1931: Scranton, Austin, Atlanta, Lynchburg, Worcester, Jackson, Pottstown, and Omaha.

Five cities registered advances over June, 1930: Scranton, Austin, Lynchburg, Jackson, and Pottstown.

To Build Firesafe Homes

DON L. JACOBSON, president, and Charles W. McCumber, secretary, of the Firesafe Home Builders Corp., 333 N. Michigan Ave., Chicago, announce that they have access to \$10,000,000 of insurance company funds for first mortgages on new residences in the Chicago suburban area, to be erected by them following their Firesafe Home Bureau specifications.

Loans will be made on single family residences costing from \$6,500 to \$25,000. They will be 15-year amortized mortgages carrying 6 per cent interest, with monthly payments figured at \$8.44 per \$1,000.

The construction to be used is steel joist, concrete floors and masonry bearing walls of the type with which Mr. Jacobson has been associated for several years.

Bulletins on Bags

SAVING money for the customer is the keynote of a series of news bulletins now being sent out by the Associated Manufacturers of Multi-Wall Sewn Paper Bags to contractors, engineers and others who use or specify cement and similar rock products.

Veneer Companies Unite

THE Flexwood Company, manufacturers of flexible cabinet wood veneers, has announced that they have become associated with the Mengel Company, of Louisville, Ky., and the United States Plywood Company, of New York, in an expansion program involving additional manufacturing and distribution facilities.

It is planned to develop, produce and distribute wood products and to carry on an intensive and successful sales promotion program.

New Catalogs Offered to Builders

143—"The Sawmaster," a circular describing the new light weight portable simplified power machine offered by the Master Woodworker Mfg. Co., Detroit, Mich.

144—"Westinghouse Nofuze Load Centers, Panelboards, Switchboards & Industrial Breakers." A new complete catalog of 76 pages presenting "De-ion" circuit breakers. The Westinghouse Electric & Mfg. Co., E. Pittsburgh, Pa.

145—"General Cable Building Wires and Cables," data regarding insulated wires and cables of all types offered by the General Cable Corp., New York City.

146—"Mantel-pieces and Fire Place Accessories," a 72-page portfolio of the beautiful wood mantels offered by The Brecher Co., Louisville, Ky.

147—"Burnham Boilers," the 1932 catalog of the Burnham Boiler Corp., Irvington, N. Y.

148—"Deming Water Systems," a 48-page handbook of rural water supply, by The Deming Co., Salem, O.

149—"Hot Water for All Domestic and Commercial Requirements," featuring the automatic oil-burning water heater of the Motor Wheel Corp., Lansing, Mich.

150—"Edge-Lite' Bathroom Cabinets, Mirrors and Vanities," a 12-page design

book by the Henkel "Edge-Lite" Corp., Chicago, Ill.

151—"Weisway Leakproof Shower Cabinet," offered by Henry Weis Mfg. Co., Inc., Elkhart, Ind.

152—"Standard' Plumbing Fixtures for the Home," a 64-page condensed catalog in color, by the Standard Sanitary Mfg. Co., Pittsburgh, Pa.

153—"The Conquest of Health's Greatest Enemy," showing the advantages of the Holland air-conditioning unit, by the Holland Furnace Co., Holland, Mich.

154—"Ilgair Kitchen Ventilators," a pamphlet on kitchen ventilation, by the Ilg Electric Ventilating Co., Chicago, Ill.

155—"The New Freedom," a modernistic presentation of the product of the Wayne Oil Burner Corp., Fort Wayne, Ind.

156—"New Facts on Oil Heating for Architects and Engineers," compiled by the Williams Oil-O-Matic Heating Corp., Bloomington, Ill.

157—"Kewanee Residence Type R Boiler;" 12 pages of heating data by the Kewanee Boiler Corp., Kewanee, Ill.

158—"The Kitchen of Today;" beautiful new designs in color of the Domestic Science Kitchen Units developed by the McDougall Co., Frankfort, Ind.

159—"Milcor Metal Bases, Window Trim and Stools with Expansion Wings," a satisfactorily modern presentation of the metal trim and accessories offered by the Milcor Steel Co., Milwaukee, Wis.

To get any of the above catalogs put down number or title and send this coupon to American Builder and Building Age, 105 West Adams Street, Chicago, Illinois.

Name..... Business.....

Address



**LOOK FOR MORE
THAN STAMINA
TO FIND THE BEST
TRUCK VALUE**

When you buy new trucking equipment of any type or size, make sure that it is designed and built to fit modern conditions. Stamina is important, to be sure. But even the time-tried trucks of yesterday may be costly investments today, if they are not adapted for the most advanced trucking practice.

The greatest truck value you can get is a soundly-built truck that fits its job, and that measures up to today's trucking standards. You will find it in a GMT. General Motors Trucks have always been

sturdy and dependable. The GMT line is complete. And GMT designs are up to the minute, for General Motors Truck engineers are constantly in touch with trucking operations in all sections of the country, and meet each changing requirement with a hauling unit that exactly fills the need.

See the General Motors Truck representative in your locality, or write direct to the factory, for full details on GMT trucks that are built to fit modern conditions.

GENERAL MOTORS TRUCK CO., PONTIAC, MICH.
(A subsidiary of Yellow Truck & Coach Mfg. Company)

Time Payments Available Through Our Own Y. M. A. C.

General Motors Truck Company, Pontiac, Michigan
Send me "Cutting Distribution Costs With Motor Trucks."

Name _____

Address _____

Business _____

SO-H

**GENERAL MOTORS TRUCKS
AND TRAILERS**

THE RIGHT TRUCK FOR EVERY RUN—1½ TO 20 TON

PRACTICAL JOB POINTERS

A reader's exchange of tested ideas and methods, taken from their own building experience. Two dollars will be paid for each contribution published.

To Fit a Threshold

HERE is a method of cutting in a threshold that assures a perfect fit and makes a simple matter of a job that many carpenters find troublesome.

Take a piece of board about a foot longer than the door is wide and lay it down on the floor in front of the doorway, pressing it against the casings, or the plinth blocks as the case may be. Now take your rule or a straightedge and lay one end of it flat on the board and press the other end against the face of the door jamb. Mark clear across the board with a sharp pencil. Then place your straightedge against the rabbet and the casing in turn, marking across the board as before. Then mark the other end, being careful not to let the board move.

Now pick up the board and look at your marks; the chances are ten to one that instead of being parallel to each other they will diverge slightly, which means that they would be practically useless had you put them on a threshold in this manner. That is why you use the board. Now you take your threshold, lay it on the floor in front of your board, take your straightedge and placing it carefully on the lines you have made, transfer them to the threshold. This brings your measurements back to their exact original position. In marking on the bevel of the threshold it is well to use a jackknife as it is more accurate than a pencil. Now all you have to do is measure the depth of the rabbet from the edge of the frame and make a corresponding mark on the threshold, measuring from the bevel.

Saw carefully to the marks, cutting under slightly, then split the pieces off with a chisel and your threshold is ready to put in place.—EVERETT MACKEEN, Wakefield, Mass.



How MacKeen Gets Threshold Marks in Right Place.



Clean White Basements

BASEMENT walls when made of poured concrete or concrete block can be given a permanent coating which also helps to damp-proof, with white non-staining cement.

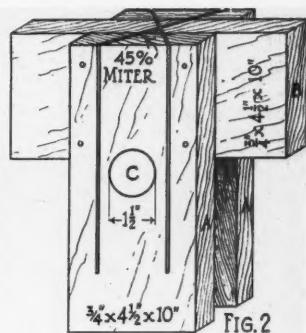
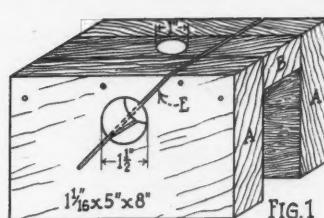
Scrub the walls clean and keep them saturated just below the point where the application has a tendency to run. Mix the cement with water to the consistency of thin batter, not too much at a time, say about one gallon. I use a granite kettle or bucket because it is easy to keep clean. Keep the mixture well stirred. Apply heavily with an old stubby paint brush. As soon as the first coat has set apply another.

This is also an excellent treatment for areaways.

The ordinary basement will require one-half to one bag of cement and one to two days' labor depending upon its size. The treatment is very economical and absolutely permanent.

I believe this detail returns bigger dividends for the expenditure than any other wrinkle I have employed.

Good cement colors may be added for tinting, but this will usually require a third coat and should not be added to the first coat.—R. R. FLING, Columbus, Ohio.



Handy Miter Box

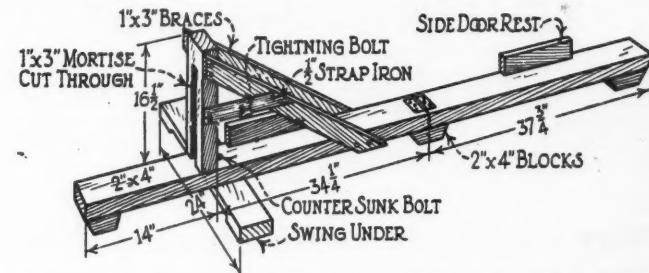
AHANDY miter box for cutting the moulding on head casing and side casings is made of two pieces $1\frac{1}{8} \times 5 \times 8$ inches (A), and one piece (B) $1\frac{1}{8} \times 1\frac{1}{2}$ inches nailed between and flush on top, with $1\frac{1}{2}$ inch hole (C) bored through the three pieces and a 1-inch hole bored down through the piece B. These two holes allow you to see your mark. E represents the saw cut square across the top and at a 45 degree angle down. By reversing the block, you have a right or left hand cut.

Figure 2 shows another box made for cutting a miter on a moulded base. It is made of two pieces of $\frac{3}{4} \times 4\frac{1}{2} \times 10$ inch oak (A) and one piece of $\frac{3}{4} \times 4\frac{1}{2} \times 10$ inch W. P. (B) nailed together as shown. A $1\frac{1}{2}$ inch hole (C) is bored, as shown, so you can see your mark when this is placed on top of the base board.—E. O. BALL, Milan, Mich.

Folding Sash and Door Vise

NOT long ago I got tired of nailing up a new sash and door vise on every job so I worked out one that could be folded up and taken from job to job. I can recommend it to others as it is easily folded and moved and saves a lot of time.

The sketch shows just how this vise is made, even better than I could describe it. To use it, set it on the floor as



A Folding Sash and Door Vise That Can Be Taken from Job to Job Saves Time and Can Also Be Used for Cutting Wide Boards.

shown, place the sash or door between the two side braces, slip a shim between the tightening bolt and the door, and tighten the bolt. In place of the shim a block can be attached to the tightening bolt so that it will always be in place to prevent marring the door.

I also find this vise handy for holding wide boards to be cut on the mitre. For instance, mark the cut on a baseboard, then put it through the slot in the upright piece of the vise and cut close to the upright.

KENNETH DEMCHUK, Camp Lister, B. C. Canada.

Favors Concrete Strip

A CONCRETE strip running around the house— $3"$ wide and about $3"$ deep—saves time and keeps the foundation clean.

It saves time in trimming the grass, as the mower can be run with one wheel on the concrete.

It keeps the foundation clean by not allowing a heavy rain to splash dirt on it. This especially, where the house is white or stucco, can add to the appearance.

It costs but little to build, as no forms are made. Just cut out the sod, and fill to dirt level with concrete. Finish with a trowel.—BROOKS SHUMWAY, D-4, Hines, Ill.

EDWARDS



Metal Ceilings

Make Floor Space of Waste Space

Beautiful, economic, sanitary, verminproof and fireproof. Hundreds of beautiful patterns deeply embossed in permanent metal. Die cut nail holes for easy alignment. Get our prices for this profitable work.

Edwards Metal Spanish Tile and Shingles

All the massive beauty of tile or slate at a fraction of the weight and cost. Made in galvanized steel, terne plate (tin), sheet zinc and pure copper. Roofing Book AB shows installations 25 years old. Send roof dimensions for low prices.



THE EDWARDS MANUFACTURING CO.

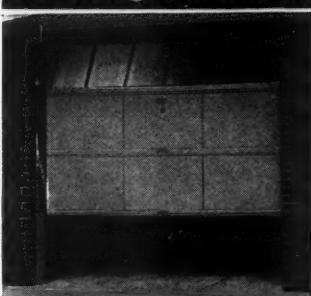
542-562 Eggleston Ave.

Cincinnati, O.

World's leading manufacturers of Sheet Metal Building Materials

NEW STEEL DOORS

For Garages, Service Stations and Other Buildings



OVERDOOR
OPERATING OVERHEAD

Truscon Overdoors offer all the advantages of an overhead operating door, plus the strength and uniformity of steel panels, neat appearance and perfect balance which assures smooth operation. They are strong and durable; never swell, warp or stick.

Write for complete Steel
Door literature
TRUSCON STEEL COMPANY
YOUNGSTOWN, OHIO

Contractors

MAKE REAL MONEY AGAIN



The American Method of refinishing old floors gives you the opportunity of making some real money again and a lot of it.

We supply business getting circulars and cards which bring plenty of work. All that is required is some ambition, a small down payment and an

AMERICAN FLOOR SANDER

The rest is easy. If you want to know how to get the money rolling in again write quick for full particulars, sent without obligation.

THE AMERICAN FLOOR SURFACING MACHINE COMPANY

511 South St. Clair St. Toledo, Ohio



House at "Homeland," Baltimore, Md. Builder, Phillip S. Morgan. Cabot's Collopakes on Stone, Shingles, Trim and Shutters.

"In Homeland"

Philip S. Morgan, Builder, Uses Collopakes Only for All Outside Work

Philip Morgan, the builder of this beautiful little development outside Baltimore, used Cabot's Collopakes on almost every possible building material, and received outstanding effects.

Whether the house you are building is brick or stone, stucco or shingles, Cabot's Collopakes (new scientific colors for every paint use) will give it the finishing touch of beauty. Cabot's Old Virginia White gives all the coolness and texture of fresh whitewash yet is waterproof and long-lived; Cabot's Gloss Collopakes have a lasting high gloss that stands up outdoors under severe weather conditions and *do not fade*, even in the greens. Cabot's Interior Flat Collopakes are washable flat colors for interior use. All Collopakes, because of the patented way they are made, go further, go on smoother and last longer.

Send the Coupon below for more information

Cabot's Collopakes

Made by the makers of Cabot's "Quilt," everlasting insulation which makes a house cool in summer, warm in winter and cuts fuel bills.

Samuel Cabot, Inc. 141 MILK ST., BOSTON

Please send me your Collopake color card and full information on Cabot's Collopakes.

Name _____

Address _____

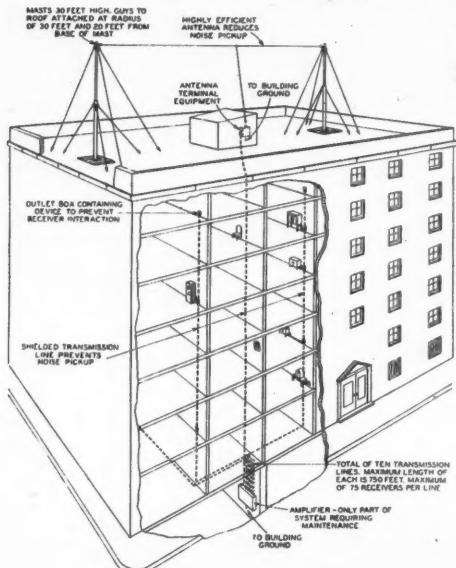
AB-8-32

What's New in Building Products

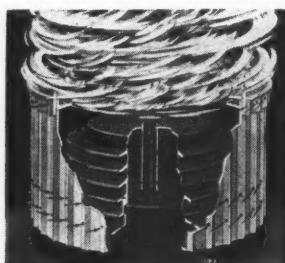
For further data about any of these items write American Builder Information Exchange, 105 West Adams Street, Chicago.

RADIO AERIAL—A system whereby as many as 3,000 radio receiving sets can operate independently on the same antenna without interfering with each other has been perfected, according to an announcement by a large electrical manufacturing company. The sets can be of any make the individual chooses. A city's roofs freed of the fire hazard and the unsightly tangle of innumerable individual antennas thus becomes a scientific possibility.

The system is designed primarily for hotels, apartments and other multiple dwellings and is aimed to overcome the



At left, new radio aerial system for apartments.



The boiler unit and burner at right are new and improved oil heating equipment.

increasing problems which dwellers in such buildings face in obtaining good antenna facilities for their radios at reasonable cost. Modified forms of the system have also been designed to operate a much smaller number of radio sets.

The receiving system is protected against "man-made" static, those interferences which the ordinary lead-in wire commonly picks up from sources within a building, such as elevator motors and other electrical devices. The loss in receiving power usually caused by the great length of the lead-in wire and its high capacity to ground is overcome. Every receiving set connected to the system is electrically isolated so that it cannot put any noises back into the system to disturb the operation of others on the line.

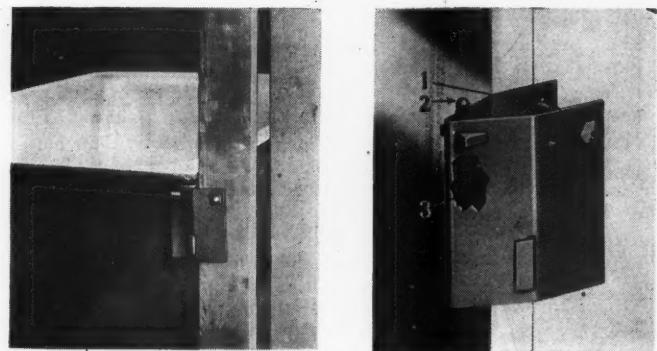
NEW BATH BRACKET—To support the built-in bath and tie it to the walls, a new bracket has been developed—a simple, practical, inexpensive device that prevents tubs from pulling away from plaster or tile, thus lessening materially the possibilities of unsightly and insanitary cracks which appear so often where rim and wall meet.

The brackets are small and light, but are made of tough, stamped metal, and each will support a weight of more than 750 pounds. The device is designed to be fastened to

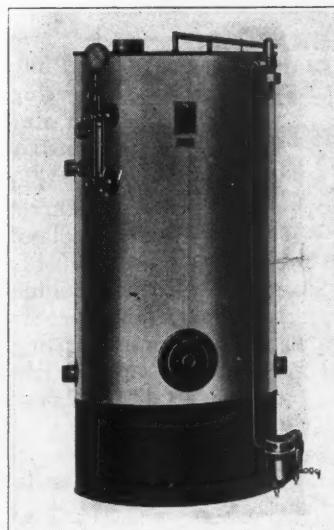
a stud, or 2 x 4 upright, by a single heavy bolt inserted horizontally. An adjustable vertical screw makes it possible to give just the right amount of support at each point, so the fixture rests evenly on base and brackets.

Three brackets are recommended for installation on a corner bath—one on the end and two at the rear. On a recess tub, four brackets are suggested—one on each end and two in the rear.

Built-in bathtubs may be leveled and "set" easily, quickly and accurately, using this new bracket, and when the fixture has been anchored properly it becomes an integral part of the finished walls, preventing the fixture from sagging or otherwise developing a crack between the rim and the plaster or tile.



Below—New light weight speed saw.



LIGHT WEIGHT ELECTRIC SAW—A unique new electric hand power saw has recently been put on the market that combines in an especially effective way lightness of weight, so that it is easy to handle, and strong reserve power, so that it will rip two inches of lumber at a high speed.

Many excellent features are contained in the new saw. Any depth or angle desired is obtained quickly and accurately by a twist of the thumb screw.

Other features include low price, efficient gear drive, one horsepower motor, weight only 18 pounds, can be used with radial arm converting it to overhead cut-off and rip saw.

NEW BOILER UNITS—Of interest to those considering oil burning equipment is a new oil-burning boiler with a new improved self-stabilizing burner. This burner produces a whirling or gyrating flame produced without mechanical motivation. In the burner itself, there is not a single moving part, the design being such that incoming air currents are naturally forced into rotating motion. Spiral deflectors within the flues cause the continuance of this rotating motion of the heat units, and by lengthening the distance of heat travel, greatly increase extraction.



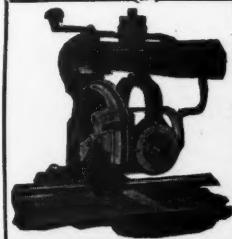
If higher quality, more brilliant lustre and increased transparency are important advantages . . . if they can be had at no extra cost . . . Then there can be no reason for offering your trade anything but Lustraglass. • Lustraglass has the preference of architects and builders everywhere. . . . It is the whitest of all glass made for windows, transmitting more daylight and a substantial amount of the shorter ultra-violet rays of sunlight. IT COSTS NO MORE. Send for Booklet A-430 . . . it's free.

AMERICAN WINDOW GLASS CO. • PITTSBURGH, PA.

Also makers of Lustrawhite Picture Glass, Armor-Lite Safety and Bullet-Proof Glass, Tintaglass, Photographic Dry Plate Glass, $\frac{3}{16}$ " and $\frac{7}{16}$ " Crystal Sheet Glass, Ground Glass, Chipped Glass and Bulb Edge Glass.

LUSTRAGLASS
the ultra violet ray window glass

for Range!



29 distinct cutting operations in lumber, tile, brick and metal.

DEMOLITH
MACHINES CUT WOOD—METAL—STONE

PRICED FOR TODAY'S MARKET

DE WALT Products Corp.
218 Fountain Ave., Lancaster, Pa.

KAUBLE of IOWA
made \$1980
In Spare Time

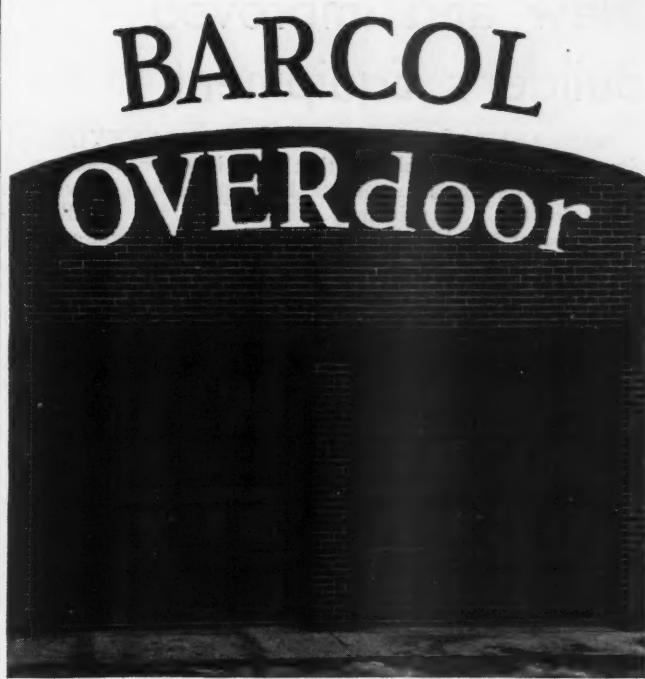


BIG EXTRA INCOME--We Tell You How Manufacture Colored Pottery, Garden Furniture Colorcrete offers you quick returns whether spare, full time or side line basis. For example, during part time Rogers of Washington made \$700; Bowman of Maryland \$1196; Kauble of Iowa \$1980, etc.

SUPPLY YOUR TERRITORY with smart permanent Pottery, Vases, Flower Boxes, Bird Baths, Garden Seats, Flagstones, Porches, Fireplaces, etc. Colorcrete makes them in 30 colors, tints and shades—beautiful pieces of art that sell on sight.

BIG MONEY FOR YOU making these attractive designs. Sell for 6 times cost. Easy to make, small space required. With a few molds, costing now \$30 up, you can get this big extra income. Write for free Booklet today. Also ask for new low prices on block, brick and tile machinery.

COLORCRETE INDUSTRIES INC.
500 Ottawa Ave. Holland, Mich.



Advertises a Good Builder

All the world can see the work of a contractor or builder for years after the job is done. Good work is good advertising which doesn't cost a penny. It builds a good reputation, brings in new business.

When you build or modernize a garage, not only is your work seen by many but it is used by your customer—a constant reminder of the builder which remains long after the cost of the job is forgotten.

The Barcol OVERdoor gives your customer enduring satisfaction and gives you the reputation for doing good work which is the finest kind of advertising to bring in more business and more profits. The Barcol OVERdoor is easy to sell, because of its many advantages, and easy to install.

Get complete information about the Barcol OVERdoor. That's easy, too. Simply write, wire, phone or

Use Coupon below

Most customers would like to have this type of door—and will gladly pay for its extra quality and service.



BARBER-COLMAN COMPANY
ROCKFORD, ILLINOIS, U. S. A.
Established 1900

BARBER-COLMAN COMPANY, Rockford, Ill.
Please send further information about the Barcol OVERdoor.

AB-B-32

Name _____
Address _____
City _____ State _____

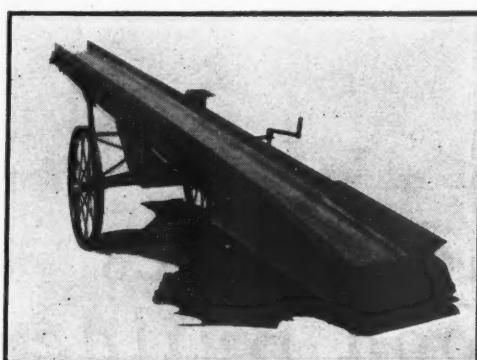
New and improved Builder's Equipment

PORTABLE TROUGHED BELT CONVEYOR—In line with present policies that permit close economy in material handling, a new portable troughed belt conveyor is being built. It is primarily intended for the handling of sand, gravel, crushed stone and other abrasive materials by contractors, in material supply yards, sand and gravel pits.

The conveyor belt is 18-inch wide, of high grade rubber. It runs over ball bearing idlers closely spaced and equipped with pressure lubrication fittings.

A steel plate receiving hopper at the foot end serves to center the load onto the conveyor belt. The receiving hopper plates are equipped with replaceable rubber wear strips.

The conveyor is equipped with steel skirt plates for full length which provide a carrying trough 6 inches deep.



Troughed belt handles building materials rapidly and cheaply

LACQUER SPRAY—Two new heads for paint spray guns have recently been announced that are designed especially for use with the new synthetic lacquers, enamels and similar finishing materials. They will produce the finest type of finish. One is for use with suction material feed, the other for use with pressure feed.

These spray heads make it unnecessary for users of paint spray guns to buy a complete spray gun to handle the new synthetic enamels.



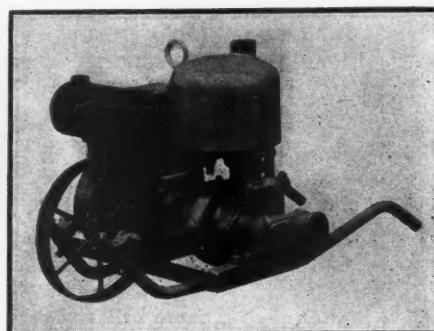
A variety of kinds of synthetic lacquers can be handled by this new spray gun and head attachments

12,000 G.P.H. PORTABLE PUMP—A new 2½-inch self-priming centrifugal pump of the recirculating type, automatic in action, is of interest to contractors. Factory tests show the new model meets, with capacity to spare, the A.G.C. 2½-inch pump rating of 12,000 gallons per hour on a 10-foot suction lift and easily meets the A.G.C. maximum lift rating of 25 feet. The weight is only 305 pounds; height only 28 inches; width only 36 inches.

The manufacturers claim a new and unique self-priming system which is built around a new device known as the prime control. With this control the pump recirculating system can be adjusted to assure maximum capacity and minimum priming time on any suction lift. It is claimed that this new pump will pick up its prime on a 15-foot suction lift in less than one minute.

The impeller is of the open trash type with two blades instead of four. This revised design is capable of handling

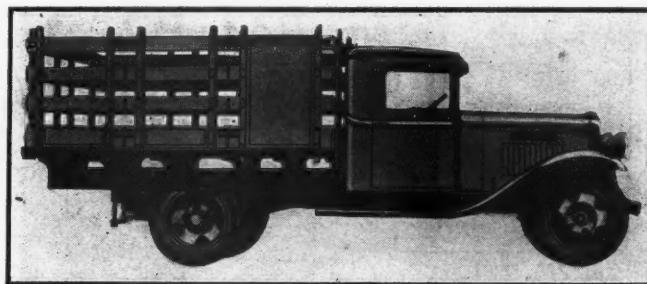
a high percentage of solids and will pass any sphere up to ½ inch in diameter. Power is supplied by a compact air cooled engine. Pump and engine are mounted together on a wheelbarrow frame for one handling. If desired, the pump and engine can be removed from this frame as a unit by loosening four bolts. A ring on top of the pump permits it to be dropped down into the hole with block and tackle.



Small, light in weight and portable, this new pump is unusual in the large volume of water it can handle. It is rated at 12,000 gal. per hour

LOW COST TRUCK—Featuring a full-floating rear axle and main and auxiliary rear springs, a new truck is offered the building field with ten different body types covering a wide range of use at a very low cost. Straight rating of the new model is 10,000 pounds and when used as a tractor with the recently announced semi-trailer, the payload capacity can be practically doubled.

The 6-cylinder engine, developing 66 horsepower has a counter balanced crankshaft equipped with an harmonic balancer which eliminates destructive engine vibration, at any speed. Full-pressure lubrication is provided, including rifle-drilled connecting rods. Through a heavy-duty transmission, with four speeds forward, tubular propellor shafts and a rugged full floating rear axle, the power of this engine is transformed into profitable truck work.

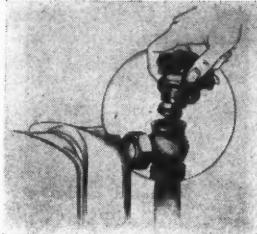


This low cost six cylinder truck develops 66 horsepower and is very suitable for construction purposes

BONNET ASSEMBLY—A replacement unit designed for just one purpose—to bring modern efficiency to any standard make or size of packed or packless inlet valves—is now offered builders. The cost of the change, including installation, is so low that it is said to be more than repaid by economies effected during one heating season. Savings are from one-third to one-half the cost of any high grade valve.

Installation is very simple. Merely insert the unit in the old valve body and screw tightly in place; no special tools, machining, reaming or fitting. The simple packless feature is all-metal, is not subject to deterioration, wear or cracking. Life-time efficiency is assured by the quick-opening, high-lift construction, while unusual ease of operation and accuracy of control assure satisfaction.

New bonnet assembly is installed by merely screwing into place. It is of simple, lasting construction and low in cost



PROTEX PLAN OF WEATHER STRIPPING PROVIDES GREATER PROFITS

BUILD A BUSINESS OF YOUR OWN—IT'S MORE DEPENDABLE THAN A JOB

Quick sales big profits—satisfied customers and a business of your own that can be operated in your own town. This is the opportunity that is yours if you become a Protex Weather-Strip representative. The seasonal rush is approaching—write for complete details to

PROTEX WEATHER-STRIP MFG. CO., Dept. A.B., 2312 W. 69th St., CHICAGO



PRICE LOW - QUALITY HIGH

NOW, you can install the "OVER-ALL" Door Set for almost as little as the cost of ordinary garage door hardware. Due to the simplicity of the "OVER-ALL" design, this door undersells others by \$10 to \$60 per installation. The "OVER-ALL" is mechani-

"OVER-ALL" FEATURES

- 1 Lower Cost
- 2 Simpler Design
- 3 Greater Durability
- 4 Quicker Installation
- 5 Easier Operation
- 6 Guaranteed Performance

cally right in every detail. Counterbalanced, fitted with roller bearings and built without springs. Easily installed and operated. Performance guaranteed. Write us today for facts about the "OVER-ALL" and our big profit distributor plan for established dealers.

HALL MANUFACTURING CO., 3031 First Ave., N.E. CEDAR RAPIDS, IOWA.

If you do not find what you want

IN THE AMERICAN BUILDER AND BUILDING AGE WRITE US AND WE WILL TRY TO GET IT FOR YOU.

AMERICAN

Steel Sheets for Building

High Grade Sheets and Terne Plates adapted to all modern Building Construction Uses: Roofing and Siding, Gutters, Spouting, Eaves Trough, Flashings, Ventilators, Terne Roofs, Heating and Ventilating Systems, and all general sheet metal work. KEYSTONE Copper Steel gives Maximum Rust Resistance.

This Company manufactures a complete line of AMERICAN Apollo Best Bloom Galvanized Sheets, Galvannealed Sheets, Heavy-Coated Galvanized Sheets, Black Sheets, and Sheets for Special Uses; also



STAINLESS
Steel Sheets and Light Plates

KEYSTONE Rust Resisting Copper Steel Sheets. AMERICAN Roofing Terne Plates and Long Terne are well known in the building field. Leading metal merchants sell these products, or can procure them for you.



American Sheet and Tin Plate Company

General Offices: Frick Building, Pittsburgh, Pa.

SUBSIDIARY OF UNITED STATES STEEL CORPORATION



CHICAGO, ILL. — The 208 So. La Salle Street Building
CINCINNATI, OHIO — Union Trust Building
DENVER, COLO. — First National Bank Building
Pacific Coast Distributors—Columbia Steel Company, San Francisco, California.

DISTRICT SALES OFFICES:
DETROIT, MICH. — NEW ORLEANS, LA.
NEW YORK, N. Y.

Buhl Building
921 Canal Street
71 Broadway

PHILADELPHIA, PA.
PITTSBURGH, PA.
ST. LOUIS, Mo.

Export Distributors—United States Steel Products Company, New York, N. Y.

Widener Building
Frick Building
Mississippi Valley Trust Building

LETTERS from Our Readers

You are invited to write your views on any subject of interest to the building industry. 300 words should be enough!

How Does It Work?

To the Editor:

A number of carpenters and contractors have been asking us about the article appearing in the June issue of your magazine, "Builders and Dealers Co-operate to Figure Fair Price on Houses."

We note that the key number is given on the houses shown in this issue but we do not have the Dealer's Key to figure them out for our customers. Will you kindly give us some information on this key—cost, how it is worked, etc.

NICOLAYSEN LUMBER COMPANY.

Answer:

If you will follow this department each issue all information will be obtained.

Editor.

Wants "Basic House" Data

To the Editor:

In your June, 1932, issue you have a very fine article headed "Builders and Dealers Co-operate to Figure Fair Price on Houses."

We are Real Estate Developers and are consequently vitally interested in the plan and would like to get more complete information.

From whom can we obtain the cost of the basic house for this section and what lumber dealers in this vicinity are co-operating in the plan?

Thank you for any information which you can furnish us.
KINGMAN & RICHARDSON, Realtors.

Answer:

Write A. W. Holt, Director of Service Merchandising Council, National Retail Lumber Dealers Assn., Chicago.

Editor.

Marckres Likes House Pricing Service

To the Editor:

From A. W. Holt, I have a copy of your correspondence with the Pauls Lumber Co. I desire to express my appreciation of your co-operation in bringing our association into the picture.

It seems to me that one of the most forward steps taken in the merchandising of homes is the making quickly available of the exact costs to build, wherever located, of the homes with plans that are shown in your publication.

I also want to take this opportunity to compliment you particularly on your June number. While they are all good, there was something or rather a number of things, about this particular number that appealed to me as being of exceptional excellence. I do not see how any dealer can afford not to be numbered among your subscribers.

IOWA LUMBER AND MATERIAL DEALERS ASSN.
Charles D. Marckres, Secy.

We Started Something

To the Editor:

I am starting out on a modernizing campaign solely on the information that has been published in the AMERICAN BUILDER. Darien is a small town, but as yet there has been no evidence of any enthusiasm along this line.

My first step towards building on a larger scale than in previous years has been to link up with a prominent realtor in Darien, and we are building the first house under the Colonial Homes Co. agreement. The AMERICAN BUILDER has helped build up my prospect file with its suggestions. Now I am working on an idea of stimulating remodeling, etc., as outlined in May, 1932, issue.

We have started with a letter to each home owner (compiled names from the tax list checked for their business and

value of property from the city directory). The letter is a combination of ideas, and I confess, some phrases from letters printed in your magazine. We hope to follow this by a canvass.

THE COLONIAL HOMES CO.
By B. F. Tompkins, Jr.

It's Passed—Now See What They Say

To the Editor:

Here in Madison there are 8 or 10 people every day who want to build small homes if they could arrange for financing; but they cannot get any loans from the banks, building and loans or trust companies. These institutions tell us that they will be able to loan out money if the Home Bank Bill passes.

J. J. FITZPATRICK LUMBER CO.

Smaller House Designs

Albert Lea, Minn.

To the Editor:

If you wish to have some small part in doing away with this "Republican prosperity" (?) and bringing back livable conditions, why not try putting out a few small house plans of, say, 4 or 5 rooms, very moderate in price, as the average worker has very little money to spend.

No one wants a large house; in fact, the larger houses are a drug on the market.

Remember, we are not all Congressmen or Senators.

ANDERSON BROS., Contractors.

A Bull's-Eye

Cuyahoga Falls, Ohio.

To the Editor:

Your editorial, May issue, on Automobiles and Roads vs. Homes hits the mark pretty generally but, like all special pleading, it sometimes makes its bull's-eye by shooting first and then drawing a circle around the hole.

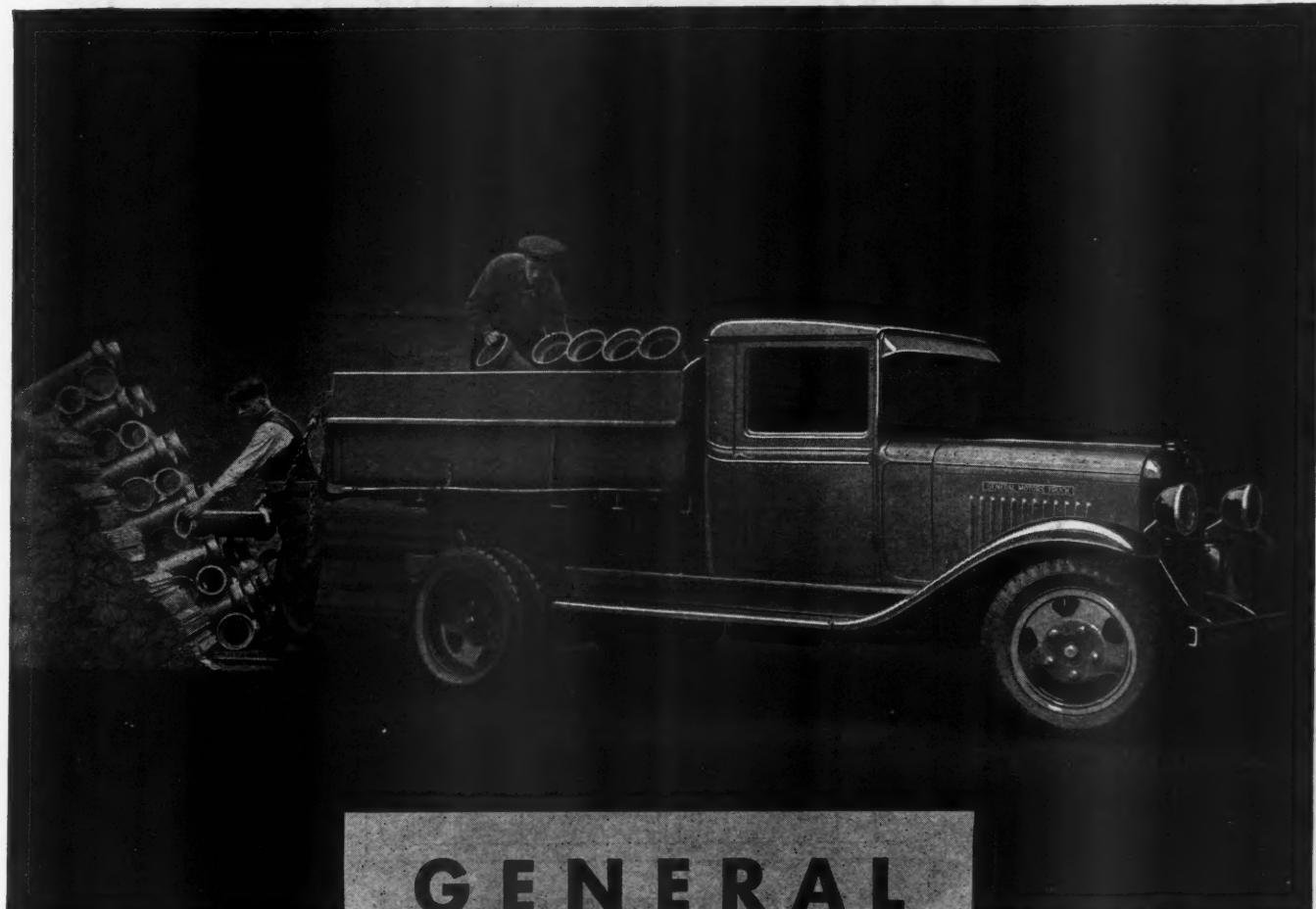
I am interested in every phase of the subject. I have lots for sale—wish I could sell them—I have done some building and my engineering experience has been mostly in the automotive line.

Does the money spent for highways and street improvement subsidize the automobile any more than it does real estate? A deep gorge lies between the city of Akron and some beautiful land. I bought part of a farm in this tract at \$300 an acre. The State and County built a bridge over this gorge and paved a highway over it connecting Akron and Cleveland. My land jumped from \$300 an acre to \$1500 a lot and land all along the paved road rose in value and total amount several times the cost of the improvement. Automobiles use this road and help pay for it without complaint but the poor land owners have to pay 15 per cent of the cost, and gosh, how they hate it. What would their land be worth without the automobiles and without pavement?

The trouble with building is like the plaint of the railroads, both are blaming the automobile for troubles due to their own unprogressiveness and old fashioned methods. The automobile manufacturers offer marvelous efficiency, speed, comfort and beauty for about the price of equipping a bathroom, and their product improves steadily. Builders around here are still building packing case models No. 1, No. 2, No. 3, and "Sundae" houses made by taking one of these boxes and adding a little "Colonial" or "English" or "Dutch" in the way of false gables, etc. Depreciation and obsolescence will eat up their value in short order when real architecture begins to appear in low cost homes of lasting quality and beauty.

F. D. HOWE,
Engineer and Builder.

Count the GMT's on the roads
AND NOTE THE CLASS OF FIRMS THAT USE THEM



**GENERAL
MOTORS
TRUCKS
AND TRAILERS**

A quick survey of any highway in the land will open your eyes to many important truck facts.

You'll find a lot of General Motors Trucks—they're popular in every section of the country.

You will see old GMT's that have been in constant service six or eight years or longer. General Motors Trucks have established enviable records for durability.

Look further, to the names of the firms that operate these trucks . . . Fleet owners and one and two-truck operators who figure trucking costs to the penny . . . Nationally known firms that always buy on the basis of sound value . . . And hundreds of haulers of perishable loads, who can't afford to take a chance with truck failure.

Talk with the operators and you will discover a sin-

cere admiration for GMT design and construction, an outspoken appreciation of GMT service facilities, and well-founded decisions to buy new GMT's when present trucking

equipment is augmented or replaced.

If you are buying new truck or trailer equipment this fall, note the increasing number of GMT's and learn how capably they meet every hauling need. "Cutting Distribution Costs with Motor Trucks," a valuable compilation of facts to guide you in selecting the most economical types and sizes of hauling equipment, will be sent free on request.

GENERAL MOTORS TRUCK CO., PONTIAC, MICH.

(A subsidiary of Yellow Truck & Coach Mfg. Company)

Time Payments Available Through Our Own Y. M. A. C.

WHY WIRING IN HOMES SHOULD BE ADEQUATE



Adequate wiring means the installation of enough circuits, large enough wire, enough outlets, switches, etc., to provide for future as well as immediate requirements.
★ Indicates outlets.

THE OWNER. You want your home to be comfortable, convenient and attractive. Electricity can give you all that; but it must have proper sized wires through which to travel. The cost of adequate original wiring is trifling compared to additional wiring after a house is built. It is trifling compared with the lasting satisfaction that it gives. Adequate wiring assures light where it is wanted, convenient switch control, plenty of outlets for appliances now and later.

THE BUILDER. You want houses that will sell, houses that will satisfy your clients. They may not think about wiring as such, but they will think about the

lamps and appliances that they want to use. Adequate wiring provides a forceful selling point. It means quicker sales and higher selling prices. It means satisfied clients who will boost you and your reputation.

THE G-E WIRING SYSTEM is profitable for both the builder and the owner. Its installation assures adequate wiring for many years to come. Moreover, it has behind it the G-E reputation for lasting, quality materials.

Ask your nearest G-E Merchandise Distributor about the General Electric Wiring System and what it will do for you, or write to Section G-1069, Merchandise Department, General Electric Co., Bridgeport, Conn.

GENERAL ELECTRIC WIRING SYSTEM

MERCHANDISE DEPARTMENT, GENERAL ELECTRIC COMPANY, BRIDGEPORT, CONNECTICUT

FOR ADVERTISERS' INDEX SEE NEXT TO LAST PAGE